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ABSTRACT

Hoping to find ways to avoid unnecessary duplication of effort by the various service areas, this seminar placed major emphasis on identifying characteristics common to all vocational areas. With the assistance of nationally recognized experts in vocational education, teacher education, and the behavioral sciences, the following topics were discussed: (1) vocational teacher education challenges, (2) systems analysis in education, (3) human development programs and concepts, (4) post secondary education challenges, (5) cooperation in vocational teacher education, and (6) teacher certification for the future. Intermingled with these formal presentations, the 108 participants also made a study of four distinct and unique models in vocational education: (1) The Teacher Institute, (2) The Webster College's Veterans Accelerated Urban Learning for Teachers (VAULT) Program, (3) the University of Tennessee Pilot Teacher Program, and (4) the Oconaluftee Job Corps Project in North Carolina. Following the general sessions the conferees were divided into small discussion groups by service areas and also by geographic areas. Due to the success of this service others are being planned for the future. (Author/JS)

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FINAL REPORT

Project No. 9-0343
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PLANNING IMMEDIATE AND LONG RANGE TEACHER EDUCATION PROGRAMS IN VOCATIONAL EDUCATION

Donald V. Brown
College of Education
University of Tennessee
Knoxville, Tennessee 37916

July 1970

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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PREFACE

One hundred and eight participants from forty-one states registered for this outstanding National Seminar on Vocational Teacher Education. The purpose of the Seminar, conducted in Knoxville on the University of Tennessee Campus from August 11-22, 1969, was to identify alternative approaches for improving programs in the preparation and upgrading of Vocational Teachers.

It was the intent of the Seminar Planning Committee and the sponsors to bring together national leaders and recognized experts in education and other related disciplines to focus on the concerns of vocational-technical teacher education. These leaders and experts acted as resource persons and interacted with vocational-technical teacher educators in this appraisal of innovative and promising approaches to educating and training teachers of vocational and technical education.

This report is a compilation of the major speeches delivered during the Seminar and the reactions of Vocational-Technical Teacher Educators to these main addresses. In addition, the presentations and the discussions within each of two series of small group sessions are also included in this report. These small group sessions were devoted to the implications of the major papers to the vocational service areas -- Agriculture, Business and Office, Distributive Education, Home Economics, Trade and Industrial, and Technical Education as well as the applications of these papers to interests or levels such as high school, post-high school, adults, persons with special needs and leadership development.

The Vocational-Technical Education Profession and the co-sponsors acknowledge their gratitude to the U. S. Office of Education, Department of Health, Education and Welfare for underwriting the expenses of this Seminar.

Particular recognition is due to the Seminar Planning Committee, whose members are recognized elsewhere in this report; to the Tennessee State Department of Education, Division of Vocational-Technical Education and the College of Education, University of Tennessee.

James D. McComas
Dean, College of Education
University of Tennessee

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ABSTRACT

Several seminars, conferences and workshops have been conducted for teacher education in specific vocational service areas. This was the first vocational seminar to bring together all the disciplines related to vocational education and attempt to identify characteristics common to each in order to prevent unnecessary duplication of effort.

To accomplish the stated objectives and purposes of the seminar, nationally recognized experts, not only in vocational education, but in teacher education and the behavioral sciences, were involved. Basic topics covered were: vocational teacher education challenges, systems analysis in education, human development programs and concepts, post secondary education challenges, cooperation in vocational teacher education, and teacher certification for the future. Each of these topics was treated in a general session with a major paper presented by a recognized leader followed with the reactions of vocational educators and other specialists.

Intermingled with the formal presentations of these major topics, the seminar participants made a study of four distinct and unique models in vocational education: The Teacher Institute, a partnership of Industry-University personnel, facilities and equipment; the Webster College's Veterans Accelerated Urban Learning for Teachers (VAULT) Program; the UT Pilot Teacher Program; and the Oconaluftee Job Corps Project in North Carolina.

Following the general sessions the conferees were divided into small groups to further explore the implications of these major topics and these new models. The participants were grouped first by traditional specialty, such as, agriculture education, business education, distributive education, guidance and counseling, etc. The second and perhaps more innovative concept of the seminar was to separate the participants by geographic areas, thus allowing for a more extensive examination of the problems of their respective area and, hopefully, to foster increased cooperative effort among the various specialities of vocational education.

Because of the success of this conference and the continuing interest shown in this cooperative effort among vocational specialists, additional vocational teacher education seminars are being planned. It is intended that this seminar will be the initial step in a long-range continuing program in the improvement of vocational technical teacher education.

INTRODUCTION

Effective planning is a crucial element for program development and effectiveness. Knowledge of technology is doubling every half dozen years, the junior college movement is sweeping the country and new federal legislation has been enacted to give manifold expansion to vocational-technical education. Colleges, universities, state educational agencies and other organizations and institutions with responsibilities in preparing teachers must review and adjust their programs if they are to meet the challenges ahead in secondary and post secondary vocational education.

The changing society (e.g. technology, business, occupational structure--reduction of personnel in pure agriculture, combination of occupations such as agriculture and business resulting in agribusiness), demands that a close look be taken at the kinds of skills teachers need when they enter the teaching field. Teachers who cannot adapt will be unequipped for tasks of training and retraining personnel for the changing society.

Reliance upon trends in the job market is a mandate for development of teacher education programs. Long-range and comprehensive multi-agency planning involving varieties of personnel offers one realistic solution to the planning for teacher needs. Man-power and economic projections must be reviewed for implications for teacher supply and demand.

Rapid expansion of post-secondary vocational opportunities as embodied in the community college, the area vocational school, and the possibility of residential vocational schools are putting a strain upon the pool of vocational and technical teachers available and in preparation. The advent of concepts of pre-vocational programs creates additional demands for vocational-oriented teachers prepared to teach younger students. Physical expansion coupled with a rapid technological change demand not only new methods of preservice training but realistic inservice training thrusts. It becomes extremely important, then, to develop plans and models which will encourage efficient utilization available resources for teacher training activities.

Teacher preparation can no longer be solely the responsibility of the university working in isolation. Educators must involve persons from the private sector of the economy (business, industry, and service occupations) in determining needs in their own occupational areas in the future years. These needs will reflect the kinds of teachers inservice retraining activities needed to keep the personnel abreast of technological advances in their specific fields.

At a time when colleges and universities are seriously reviewing and evaluating their own teacher education models, it is important that personnel in vocational and technical education begin to review their teacher education models and attempt to incorporate the best of the "general" education models and the vocational education models into comprehensive plan based upon sound theory and practice. Particular attention has been devoted to the emerging needs in teacher education for vocational and technical education in Vocational Education, The Bridge Between Man and His Work, publications 1 and 2, General Report of the Advisory Council on Vocational Education, 1968, U. S. Department of Health, Education and Welfare, Office of Education. This report is included in Notes and Working Papers concerning the Administration of Programs Authorized Under Vocational Education Act of 1963, Public Law 88-210 as Amended, prepared for the subcommittee on education of the Committee on Labor and Public Welfare, United States Senate, U. S. Government Printing Office, Washington, D. C., March 1968. Education career opportunities span the broad spectrum from teacher assistants and laboratory aids holding less than baccalaureate degrees to technical specialists holding the doctorate or other advanced degrees.

Vocational education is at the crossroads of expansion. New legislation has made possible a great deal more emphasis on teacher education than was available in the past. The Vocational Education Amendments of 1968 (PL 90-576) amend the Education Professions Development Act and earmark specific funds for vocational-technical teacher education. For new programs to be effective and for efficient use to be made of the new investment in vocational education teacher training programs, much attention must be paid to planning and program development. It is now time for vocational and technical educators to plan and coordinate educator training activities and to determine priorities for resource allocation.

Specific Objectives

Specific objectives of an institute for planning immediate and long range teacher education programs are listed below, although not necessarily in order of importance.

1. To determine immediate and long-range priorities for the improvement of preservice and inservice education for vocational education personnel.
2. To explore possible approaches in developing a master plan for vocational teacher education within a state.
3. To develop state and institutional plans for such teacher education.
4. To consider the implications of the Vocational Education Amendments of 1968 (PL 90-576) for teacher education.

5. To examine and review major societal challenges for education.
6. To analyze these societal challenges in terms of educational planning and teacher preparation.
7. To examine, evaluate and synthesize teacher education models and patterns from exemplary general and vocational teacher education programs.
8. To develop and define patterns or models for selection, recruitment, pre-service preparation and placement of vocational-technical teachers and for providing inservice vocational-technical teacher education programs.
9. To examine the needs in vocational-technical teacher education and the place of vocational education in the state's total teacher education programs.
10. To develop tentative plans based on inter-relationships within institutions and among institutions and between state departments of vocational education and institutions for determining priorities for teacher education.
11. To develop viable procedures to meet the challenges to education and the preparation of vocational-technical teachers (e.g.; a transportable inservice module that could be used in a variety of settings and modified for a number of occupational areas).
12. To prepare guidelines and institute proceedings relating to stated objectives of the institute.

Primary Purposes

The primary purposes of an institute for planning immediate and long-range teacher education programs are:

1. To examine vocational teacher preparation programs
2. To observe some specific program models
3. To clarify the occupational trends in business and industry
4. To suggest some guidelines for systematic planning
5. To assist in refocus on teachers needs
6. To examine new federal legislation implications
7. To explore the core concept for programs
8. To examine the student to program relationship (recruitment, placement)
9. To explore intra- and inter-institutional and institutional-state relationships
10. To recognize that program guidelines should concern: general education, technical content, occupational skills and professional education
11. To organize some immediate and long range program guidelines
12. To establish some priorities for program guidelines

13. To hold a critique of preparation programs and of program improvements
14. To produce a photographic, audio tape, VTR tape and written record of key involvement in the institute for future dissimulation
15. To evaluate the institute through advisory committees and self evaluation media
16. To develop a final report which will serve as a guideline and program model.

METHODS AND PROCEDURES

General

A unique feature of this institute was its planning focus. In effect, each participant in the institute became a consultant who, because of his position, expertise, and training, contributed to the output of the program. The total framework of the institute provided for the utilization of the participant's expertise in the development of the projected outcomes of the institute, and as such their crucial role in the institute was one of participation and of "brainstorming."

To facilitate greater participation and contribution of institute participants, the total design of the institute relied heavily on small task force groups, "brainstorming" and planning sessions.

Crucial elements in the institute program were to present participants with a series of challenges for teacher education followed by sessions where examples of some innovative teacher education programs (as well as programs for educator selection, recruitment, and placement) were reviewed. Time was allowed for the participants to evaluate and synthesize models similar to those reviewed. After review and synthesis, the sessions institute participants formed task groups where they planned teacher education programs and models in vocational-technical education. Results of these sessions were general (conceptual) and specific (e.g., program) for specific service areas or for particular geographic regions. Outcomes of the institute were, in reality, the synthesis of the output of each of the task groups.

Major consultants were used to present the challenges to teacher education, and especially for vocational-technical teacher education. (Examples of the challenges which were reviewed are: the expanding role of the federal government in education, the changing occupational structure with implications of vocational teacher education, manpower demands of the 1980's, etc.)

The institute advisory committee served as a panel to react to each of the challenges presented. Each member of the advisory committee served as a consultant to one of the task groups developed to work on the plans and models which resulted from thinking about the challenges. Members of the teacher education staff of the various units of vocational education at the University of Tennessee served in the task groups as assistants to the advisory council member who was the coordinator of that task group.

Program Structure

Since the focus of this institute was planning, the unique contribution of the sponsoring agency was the development of a program structure to facilitate and encourage planning. At the University of Tennessee, however, there is an added dimension; i.e., there are indeed examples of innovative teacher training programs presently being conducted, either as on-going or as pilot programs.

The Pilot Program in Elementary Education model program departs radically from traditional teacher training programs in several important ways. The pilot program staff was made available to describe the rational for this program to the institute participants.

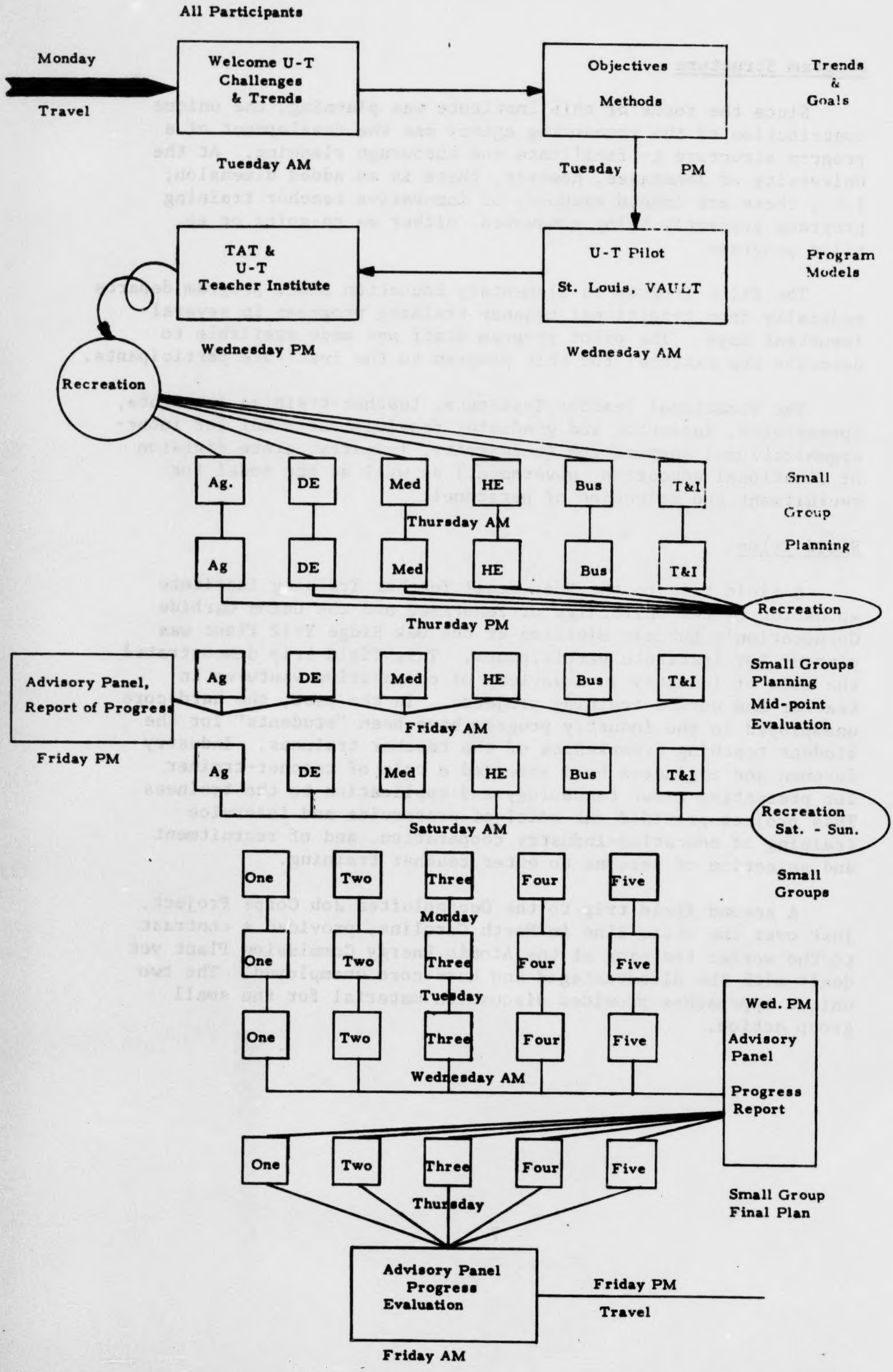
The Vocational Teacher Institute, teacher-training institute, (preservice, inservice and graduate) provides one model for inter-organizational cooperation (university, industry, state division of vocational education, government) as well as one model for recruitment and selection of personnel.

Field Trips

A field trip to the Vocational Teacher Training Institute sponsored by the University of Tennessee and the Union Carbide Corporation's Nuclear Division at the Oak Ridge Y-12 Plant was planned for institute participants. This field trip demonstrated the role of industry in a variety of cooperative ventures in teacher and worker training projects. In the past, the hard-core unemployed in the industry program have been "students" for the student teaching experiences of the teacher trainees. Industry foremen and engineers have accepted a role of teacher-trainer for presenting newer technology and application to the trainees. This project provided one model of preservice and inservice training of education-industry cooperation, and of recruitment and selection of persons to enter teacher training.

A second field trip to the Occonoluftee Job Corps Project, just over the state line in North Carolina, provided a contrast to the worker training at the Atomic Energy Commission Plant yet dealt with the disadvantaged and hard-core unemployed. The two unique approaches provided discussion material for the small group action.

PROPOSED SCHEDULE


All Participants
Monday
Travel
Welcome U-T
Challenges
& Trends
Tuesday AM
Objectives
Methods
Trends
&
Goals
Tuesday PM
U-T Pilot
St. Louis, VAULT
Program
Models
Wednesday AM
TAT &
U-T
Teacher Institute
Wednesday PM
Recreation
Ag.
DE
Med
HE
Bus
T&I
Small
Group
Planning
Thursday AM
Ag
DE
Med
HE
Bus
T&I
Recreation
Thursday PM
Advisory Panel,
Report of Progress
Friday PM
Ag
DE
Med
HE
Bus
T&I
Small Groups
Planning
Mid-point
Evaluation
Friday AM
Ag
DE
Med
HE
Bus
T&I
Recreation
Sat. - Sun.
Saturday AM
One
Two
Three
Four
Five
Small
Groups
Monday
One
Two
Three
Four
Five
Tuesday
One
Two
Three
Four
Five
Wed. PM
Advisory
Panel
Progress
Report
Wednesday AM
One
Two
Three
Four
Five
Thursday
Small Group
Final Plan
Advisory Panel
Progress
Evaluation
Friday AM
Friday PM
Travel

Planning and Writing Sessions

Time was allowed for program participants to engage in planning and writing sessions. Too often ideas generated at conferences or institutes are lost or never fully developed because no time was set aside for writing and expanding the ideas. This institute incorporated sessions when the participants assimilated ideas, formulated plans, and then actually engaged in writing the ideas and plans so that they could be used for discussion in future group sessions. These plans are included in total in this final report.

Development of Small Groups

Initial planning of this institute program included the concept of small-group action committees. In the formation of these committees, it was believed important that they be implemented by two separate procedures. First, much of the basic planning can be best completed by those teacher educators and state department personnel of the same service area (agriculture, business, etc.,) working cooperatively in small group sessions with the assistance of an advisory person having background in this same service area. The first week small groups were organized centrally around specific service areas. Second, it then appeared that direct confrontation with other major challenges could best be planned by small groups including diverse vocational experiences and perhaps similar geographic orientation. Each geographic area of our nation has somewhat unique cultural, educational and occupational characteristics. Accordingly the second week participation was small groups organized according to the geographic areas shown in the accompanying map and specifically each committee included persons, representing several service areas.

Challenges

The following challenges were suggested. As institute plans were developed specific challenges were defined and consultants were obtained to address the major challenges.

1. The changing occupational structure
2. The expansion of knowledge
3. The diffusion of education-opportunity for all
4. The productive and contributive role of the disadvantaged
5. The emerging role of state planning
6. The expanding role of federal funding
7. The cooperating venture of institution and state department

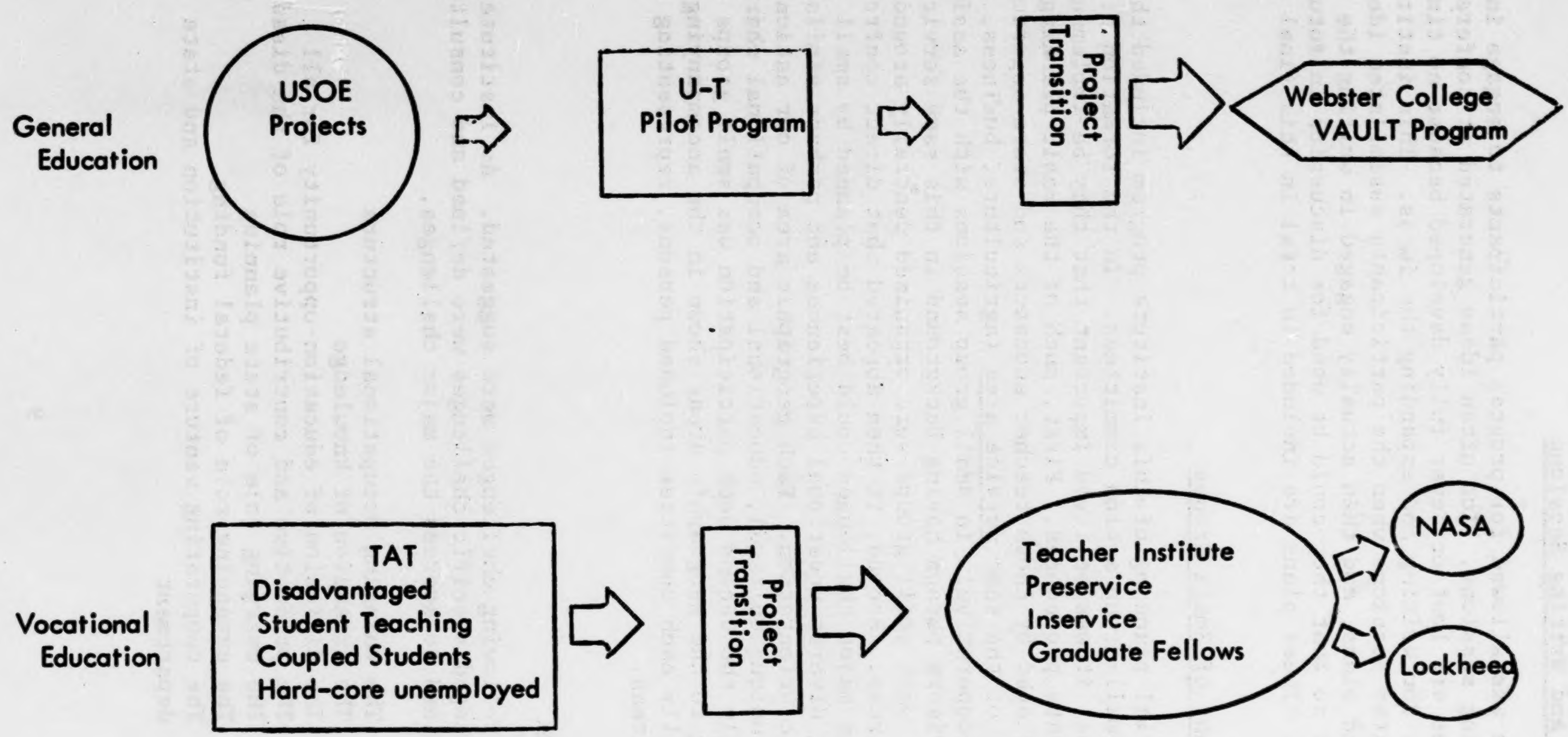

General Education
USOE Projects
U-T Pilot Program
Project Transition
Webster College VAULT Program
Vocational Education
TAT
Disadvantaged
Student Teaching
Coupled Students
Hard-core unemployed
Project Transition
Teacher Institute
Preservice
Inservice
Graduate Fellows
NASA
Lockheed

FIGURE II

MODELS AND PARADIGMS

8. The encouraging of all citizens in social and political participation
9. The mobility of today's population (interstate certification)
10. The recognizing of new media in learning
11. The applying of systems analysis planning techniques
12. The recognizing of innovative models
13. The utilizing of consultant services.

Recruitment

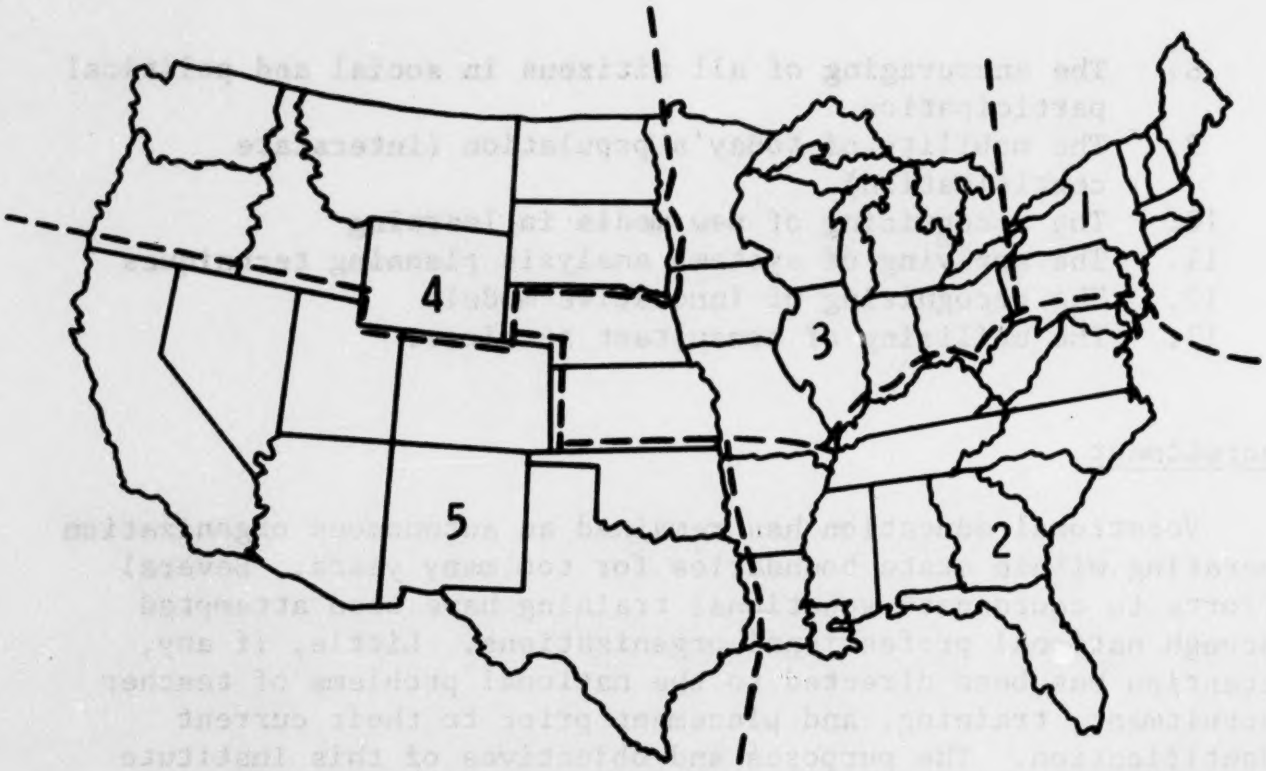
Vocational education has remained an autonomous organization operating within state boundaries for too many years. Several efforts to coordinate vocational training have been attempted through national professional organizations. Little, if any, attention has been directed to the national problems of teacher recruitment, training, and placement prior to their current identification. The purposes and objectives of this institute have been identified as offering plans for immediate and long-range resolution of these problems.

The Seminar participants included head teacher educators from major vocational and technical teacher training institutions or the departmental chairman in vocational and technical teacher training institutions. Regional representatives from the various state departments of education were selected to chair the small group action committees and were assigned major roles in the planning of immediate and long-range programs for their respective areas.

Since the program was nationwide in scope, it was desirable that individual states be represented wherever possible. Generally there is recognized at least five separate regions in the United States having a somewhat common culture, demographic background and vocational focus. To facilitate the representation of participants from a geographical area, the following system was proposed. The various states placed in a convenient group representing five geographical areas of the nation were: Northwest, Southeast, Northeast, Midwest and Southwest. The recruitment effort was directed toward participation of individual states in so far as possible with equal geographical representation from the regions identified on the map (Figure III).

Evaluation

The purposes and objectives of this particular institute demanded unique evaluation procedures. Since the purposes and objectives of this institute relate to immediate and long-range planning and the development of models, program guidelines and



SUGGESTED PLAN FOR GEOGRAPHICAL DISTRIBUTION

OF INSTITUTE PARTICIPANTS

GROUP ONE

Conn.
Deleware
Maine
Maryland
Massachusettes
New Hampshire
New Jersey
New York
Penn.
Rhode Island
Vermont

GROUP TWO

Alabama
Arkansas
Florida
Georgia
Kentucky
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Virginia
West Virginia

GROUP THREE

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
Ohio
Wisconsin

GROUP FOUR

Alaska
Idaho
Montana
North Dakota
Oregon
South Dakota
Washington
Wyoming

GROUP FIVE

Arizona
California
Colorado
Hawaii
Nevada
New Mexico
Oklahoma
Texas
Utah

FIGURE III

theoretic systems, several evaluation approaches were pertinent. It was also recognized that traditional pre- and past procedures were not applicable to the objectives of this institute.

First: It was planned that the series of small group meetings consist of participants representing a heterogeneous sampling of vocational specialties geographic areas. The purposes and objectives of these sessions were to explain teacher-education programs, models, and to identify and establish areas of commonality (core curriculum), and promote guidelines for immediate and long-range implementation. A report from each group was submitted toward the end of the scheduled sessions. The reports were presented to the large group of participants. The remaining sessions directed their attention to critiquing reports and finalizing plans for immediate and long-range implementation. Members of the advisory committee held critique sessions and evaluated the meetings at the conclusion of the scheduled session. These internal critique reports constituted one focus of program evaluation.

Second: Participants from each small group evaluated the various sections, segments, models, program guidelines, and immediate program components. Participant evaluation was aimed at the assessment of the effectiveness of presentation and the thoroughness of the topic coverage. Participants were also asked to evaluate the pertinence of various presentations and program components as they related to program objectives. Participant questionnaires and instruments were developed for these purposes. The questionnaires were administered at the conclusion of the Seminar and eleven (11) months following the Seminar. The results of these evaluations are included in this final report.

Third: Perhaps the most valid evaluation of the institute will be the future acceptance and utility of the models and program guidelines which were developed and the efficacy of establishing the long-range planning activities which the institute focused upon. This kind of evaluation, a result oriented evaluation, will take a long period of time but will be the most informational and useful evaluation process. The institute staff will request assistance from institute participants in developing a process for this sort of continuous assessment of the institute results. At the time of publication of the Final Report of the Seminar the director has received some forty (40) testimonial letters from the participants.

Fourth: A facet of evaluation planned for the institute was for an evaluation committee, consisting of the advisory committee members and representatives from each of the geographical areas of recruitment, to (1) develop a group critique of the presentations

and by their expertise, assess the effectiveness of the service-area planning sessions and the heterogeneous group sessions using the models presented and the resultant guidelines for teacher-education programs, (2) develop a self-evaluation of the advisory committee as a function of program development and (3) prepare an evaluation of the institute as a medium for program planning and development.

CHALLENGES AND MODELS

VOCATIONAL TEACHER EDUCATION CHALLENGES

Rupert Evans

In a presentation entitled "Vocational Teacher Education Challenges," Rubert Evans, Dean, College of Education, University of Illinois, discusses the aspects of staff development and teacher education in the field of vocational-technical education. Dr. Evans points out "that we do not have a program of vocational teacher education and that's a mistake." He further states, "Basically, it is the result of low priority being placed on staff development." There are two basic reasons for this situation:

1. Vocational education has a history of going through cycles of rapid expansion followed by periods of relative inaction. "When you need the staff you don't have time to develop them. When you have the time to develop them you don't need them."

2. The second reason for low priority in staff development is that the system for training leadership in vocational education has changed. At one time personnel were trained at each level from local to state, but this has changed because of salaries. At present people at the local level are paid more than those that have state jobs; thus a move to the state office means a cut in salary. Therefore, staff members in leadership positions do not have the whole picture of vocational education.

Dr. Evans suggests five propositions to help eleviate the problem of staff development:

1. Teachers' pay should be based on merit and supply-demand rather than on hours of education and seniority. Most vocational education teachers must take pay cuts when they begin to teach under the present system. Finally there is no relationship between hours of education and effectiveness as a teacher.

2. Teachers would be better off without certification than the present patterns of certification. Certification is not doing the job that it was designed to do. Many teachers who are certified do not know how to teach.

3. The primary responsibility for pre-service education ought to be in the hands of the universities with close support from local educational agencies. At present there are no professional education programs for vocational education. Finally there should be better ways of preparing teachers than through student teaching.

4. Inservice education ought to be the primary responsibility of the local education agency with some involvement with the university. There should also be an active exchange with employers where teachers go back to industry while industrial employees teach for a short period.

5. Finally there should be limitations on teacher tenure at least in vocational education. Perhaps tenure could be limited to ten years with a possible renewal. The problem is that as soon as teachers get tenure, they retire on the job. The probationary period should be longer before tenure is achieved; then it must be renewed after ten years to stay on the job.

The goal of vocational education, according to Dr. Evans, "is to develop in each person his greatest potential in an occupation and to develop that potential just as far as you can." This goal can not be reached unless the teacher knows something about all education and something about all vocational education, as well as having a special field of competence.

THE VAULT PROGRAM

Joseph Kelly

Project VAULT (Veterans Accelerated Urban Learning For Teaching) became functional at Webster College, Webster Groves, Missouri in the spring of 1968. Participants of this program will become teachers for ghetto schools after completion of an accelerated three year training period.

Veterans both black and white with disadvantaged backgrounds participated in this program. A critical need for male, and minority group teachers appears to justify a program of this type due to documented positive results of participant performance. A special curriculum for the prospective teachers has been developed for the reinforcement of weak background areas, and to provide insight into current social problems and conflicts through the media of seminar groups. The need for academic and personal counseling has been great but the attrition rate has not been a major problem as was anticipated.

This program is serving the needs of veterans seeking a place in society, and will be helping to relieve the critical shortage of teachers in ghetto areas.

SYSTEMS ANALYSIS IN EDUCATION

Walt LeBaron

Mr. LeBaron, doctoral candidate at George Washington University, indicated the five premises for the systems approach to planning for education.

1. **Every student, by the time he finishes high school, should qualify for some specific vocational endeavor. Regardless of future college plans, every student should be familiar with the realities of the world of work.**

2. **There is a growing trend to hire people who have a number of general skills, rather than workers specifically trained. This consideration is basic to any program of vocational preparation.**

3. **The lack of communication is perhaps the single greatest problem in education today.**

4. **Behaviorism is useful but not the be-all and end-all of educational thinking. Caution is required to insure that planning does not exceed our ability to explain the system.**

5. **The real problems are in understanding that we live in an age when decisions are based on information.**

New systematic analysis depends on the concentration of the quantifable aspects of analysis and the isolation and control of the numerous factors and variables made possible through the power of the computer. Here, the word system indicates a process. Systems Analysis is defined as an orderly process for, first, defining and describing a universe of interest, and, second, determining what changes in this universe will cause a desired effect. Systems Analysis begins with the broadest statement of the universe, and then isolates and defines parts of the system according to their functions, and last, notes the relationships among the functions.

Input-output models begin by describing a desired outcome of the system, then determines the changes necessary to achieve these outcomes.

The "Heuristic" approach is useful when the use of principles to guide action is needed, because of lack of a specific statement of the specific nature of the product.

A Total Design Process

One major problem in the Systems Analysis to education is a failure to consider a total design process. Here are three elements in a total design process:

1. Conceptualization and design of the operating system;
2. Analysis of the environment in which the system is going to operate;
3. A change and implementation process which will prepare the environment to accept the new system.

Constraints on System Design

Time, data, scope of the system, communications, intergration and resources.

Constraints on Teacher Education Programs

1. Certification requirements
2. Local and state personnel policies--should be adjusting to the realities of teaching rather than developing the person as a teacher.
3. Individual school administration
4. Parent's anticipations
5. The profession--highly conservative and inbred.
6. The teacher candidates.

Systems Analysis as a Step-by-Step Procedure

1. Develop a clear statement of concern. (Vocational education can be defined as an area of concern.)
2. Define the "Subsystems." (Major subsystems for vocational education could include curriculum, teacher education, guidance, research and development, and administration.)
3. Stating the objectives of the system
4. Developing alternative procedures.

Negative thinking in education effectively prevents the serious design and consideration of alternatives. If we never design an ideal program, or think about using new techniques, we will never have a basis for growth and change.

5. Selecting the best alternatives--depends on values of community, school, and the future. Here, the philosophical orientation of the decision-maker becomes relevant.
6. Implementing the system--feedback is used to determine:
   a. The continuing effectiveness of the system on the requirements for change.
   b. The continuing relevance of the system in terms of its objectives.
   c. The need for the creation of new systems because of changing objectives, new developments, or new criteria for selecting alternatives.

Applying Systems Analysis to the Design of Teacher Education Programs

An aid in this process is to ask the following questions:

1. What are the functions and tasks of teachers in the context of the school environment?
2. What do we want the teacher to do in the learning environment?
3. What knowledge and skills are required in order to perform these functions and tasks?
4. What experiences would reinforce that knowledge and give the prospective teacher the chance to practice the tasks?
5. How can this analysis of functions and concomtant knowledge and experiences be stated in terms of program goals?
6. How could a program of teacher preparation be organized to achieve these goals?

Program Construction Guidelines - Heuristics

All program experiences should:

1. Come from statements of goals and should be related to these goals.
2. Provide an understanding of the basic concepts of the subject and the ability to apply this knowledge.
3. Be designed for effective presentation, including the maximum of student activity.
4. Be designed to prevent sacrifice of student time.
5. Utilize methods of cost effectiveness.
6. Be organized sequentially, to include attention to individual cognitive styles, prior background and experience, and special learning difficulties.
7. Be designed to provide a constant system of feedback, first to the student on his progress and standing, second to the teacher on the success of the particular program, and third to the institution on the relation of the particular program to the total program of teacher preparation.

Conclusion

Systems Analysis is no magic panacea for the present problems of preparing vocational teachers, but careful planning can help insure the wise use of resources, the training of adequate personnel, and the development of alternative procedures.

HUMAN DEVELOPMENT PROGRAMS AND CONCEPTS

Betty Berzon

Miss Berzon in her speech before the National Seminar on Vocational Teacher Education presented information on the structure and content of the tapes which are used in unstructured small groups. These small groups are sometimes referred to as group counseling, sensitivity training or encounter groups. Her presentation centered around the use of pre-recorded audio tape recordings on which there are instructions for a series of sessions that a small group goes through together. The purpose of these tapes is to make it possible for large numbers of people to obtain this kind of learning experience any time, any place, without the necessity of a professionally trained leader. Three separate programs were described.

The first program discussed was "Encounter Tapes for Personal Growth Groups." These could be utilized with group members who have well developed verbal skills and with members having too highly developed verbal skills. These tapes are also utilized for task oriented groups as a training vehicle.

The second program discussed was the "Encounter Tapes for Vocational Education Groups." This ten-session program has the general goal of enhancing the vocational potential of the individual who uses it to give them better ability to experience themselves in relation to others. The sessions of this program were discussed individually as a part of the presentation.

The third program presented was the five-session encounter tape for Black-White Groups. The major purpose in designing this program was to provide group experiences in which black and white participants could confront each other. This program has a multi-use purpose in its presentation.

A PILOT PROGRAM IN TEACHER EDUCATION

Russell L. French

For one year a Pilot Program in Teacher Education has been in effect at the University of Tennessee in the College of Education. This program grew out of a desire on the part of the faculty to reflect and enhance the maturity and capabilities of the students, to incorporate promising new approaches to teacher education, and to take into account changes in the social and educational environment of public schools. Since it was the assumption that students have different personal and professional needs, wish to participate in planning personal and professional career goals, learn at different rates and in unique ways, are capable of being self-directed and self-propelling, and are capable of learning independently, it was desirous to generate new directions and procedures in the University of Tennessee's College of Education. In order for these new directions and procedures to be successful, however, it was deemed necessary to consider the following: What is best for the student? What do we want this person to be like in years to come? Are we providing programs that encourage the student to develop as an individual?

In implementation of the plan approximately forty faculty members working together aided in the development of the Pilot Program. Sixty freshmen students were engaged in the Pilot Program during the Fall and Winter Quarters via the Educational Environment and Career Choice Course. In this component of the Program students were engaged in activities that allowed them to investigate a career in teaching, e.g., tutorial efforts, discussions with educators, visits to social agencies, juvenile court, etc. Through the student activities, the College of Education Faculty was seeking answers to these questions: Why graduates with bachelor degrees in education do not enter teaching? Why undergraduate students in education reject the education career preparation after the freshman or sophomore year? Why many undergraduate students are not satisfied with the education career preparation program? As indicated in the objectives and exemplified in the types of student activities, the student has opportunities through self-examination, real teaching activities and situations, and through the aid and suggestions of educational specialists that should help him to decide whether he desires and is qualified to be a teacher.

The content of the Sophomore Year Component includes a comprehensive child and adolescent study core. Students engage in activities that should enable them to write records, construct, administer, and interpret socio-economic devices, interpret record data, and to demonstrate interviewing skills, theoretical knowledge, to use environmental modifications techniques in the classroom, to apply knowledge of principles of development and ability in identifying children and adolescents with special needs.

The Child-Adolescent Study Component will employ self-instructional materials, video taping units, films, laboratory experiences, simulation, and other identified materials and equipment which should contribute to this component.

The Self-Concept Component has as its objectives for the teacher in training the basic understanding of how the self develops and the understanding of their own selves in depth with focus on themselves as persons who are becoming teachers. Through the study of the literature of the self, (both theoretical and research), the study of themselves through group process, and self-analysis under the supervision of a clinical psychologist by means of personality tests, the student in teacher training should be aided toward understanding himself and the significance of self-concept in all learners.

The Curriculum I Component deals with those basic or more elements which are common requisites to good teaching and professional development. A series of modules incorporating self-instructional materials was developed. There is no definite period of time for a student to spend in each module. The student is allowed to move through the modules as he meets the criterion level of performance of the module. Various modules focus on preparation of instructional objectives, evaluation of learning, planning for teaching, organization for instruction, curriculum development and evaluation, ethical and professional behavior, selection and use of audio-visual equipment, use of the library, diagnosing learning difficulties, teaching disadvantaged, and philosophy of education.

The Curriculum II Component incorporates and reconstructs those methods courses presently existing in the ongoing program and is to be undertaken during the student's junior year.

The Junior Year of the Pilot Program also involves the experimental group of students in the Human Learning Component and in those phases of Curriculum I which they have not yet completed. The team approach is to be adhered to in the Human Learning and Curriculum II Components of the Program. Methods people, content specialists, educational psychologist, and supervisory personnel are utilized to provide cohesive and meaningful student experiences.

The Senior Year of the Pilot Program incorporates a three component sequence of experiences. This sequence consists of Analysis of Teaching (Fall), Microteaching (Winter), and the combined Simulation-Student Teaching Component (Spring). Materials for the Simulation Component are prepared at present elementary majors only. Students in Analysis of Teaching will receive training in interaction analysis and related non-verbal communication techniques. During microteaching, students focus on the establishment of practice of specific teaching skills, e.g., questioning, closure, establishing set, etc. The forty-hour simulation experience preceding student teaching focuses on identification, clarification and development of alternative solutions to common and critical classroom problems.

THE CHALLENGES OF POST-HIGH SCHOOL EDUCATION

James Wattenbarger

Among the many problems facing education at the post-high school level there are a number of challenges. The first of these is the challenge of universality. We are approaching a time when there will be universal opportunity for post-high school education just as was the case in elementary and secondary education in the 1800 and 1900's.

The real challenge, however, is "Can we do this in post-high school in such a way that each individual receives the kind of education he needs?"

The second challenge is that of reexamination of the purposes and functions of education. "Are we actually going to prepare people to live in the society in which we are existing at the present time?" We must consider occupational education as a part of a total educational process which begins with pre-school and kindergarten and carries on through the elementary and secondary grades.

Third challenge is posed by the needs of our society. Just as nations have done away with aristocracy as a governing process, so must aristocracy be removed from education. Every boy and girl must know at an early age that a good welder is equal to a good doctor. We, as the society, must insure and make this possible.

The fourth challenge is student recruitment. There is a problem because of no adequate understanding of guidance and counseling by members of the faculty. There is, in addition, an inadequate preparation for continued education.

A fifth challenge is that of teaching. Teachers' philosophies must change concerning their job. Renewed attention to the whole field of curriculum planning is an essential.

The sixth challenge is renewed attention to the whole field of curriculum planning. The isolation of specific programs and the absence of interdisciplinary planning causes many problems for students. The curriculum should be developed so that the basic philosophy is to keep the program open ended so no student reaches a "dead end" in his education.

The seventh challenge is the challenge of numbers. We are involved in educating everyone; we are not educating a selected few. The challenge of numbers can only be accommodated through making new institutions available throughout the United States.

The eighth challenge is an obvious one--that of change in our teacher preparation programs. We need to develop a specific and definite plan so that faculty members will recognize what is needed in a complete faculty inservice program.

The ninth challenge is distribution of work loads of teachers. Should teachers who have taught more than one be given a lighter work load than new teachers. Based on logic and concern for sound development of new faculty members, it would appear that plans for faculty inservice development would emphasize an arrangement which schedules new faculty members with lighter loads so that they may have more time to prepare their courses.

A tenth challenge is to define the goal of post-high school education. Can any of the post-high school areas be instruments of social change? Research has indicated that the level of education and the level of income are related; the whole socio-economic order is very definitely affected by education.

The eleventh challenge is of institutional autonomy. There are five principles which should affect this: (1) coordination can be achieved best through leadership rather than control. (2) Where there is assigned responsibility, there must be concomitant authority. (3) Distinctiveness of each institution should be encouraged. (4) State agency must relate with all systems; it must avoid standardization. To force everyone into the same mold is a mistake.

The twelfth challenge is of new knowledge. We don't teach as well as we know how to already so we are not really anxious to learn anything new. Whether we are anxious to learn or not, we are going to be forced to improve our teaching a great deal.

With these twelve challenges the task we face is to do a much better job of preparing people to teach. We also need to recognize that people learn in different ways. We need to develop good administrators; we need to develop good teachers; we need to listen to students; and we need to make specific and definite steps for improving the curriculum.

IMPLICATIONS FOR VOCATIONAL TEACHER EDUCATION IN 1969

John Beaumont

After the customary greetings Mr. Beaumont, former State Director of Illinois, moved right into his statement of purpose of the conference--to plan programs of teacher education to implement the Vocational Amendments of 1968. He suggested nine major considerations on which to plan a teacher education program.

The first, and most significant factor, is educating teachers to the need for student oriented programs rather than subject oriented programs. Teacher education must keep in step with current legislation as well as educational innovation which states that it is the responsibility of the vocational staff to create a dynamic curriculum to fit the needs of the student rather than expecting the student to fit into a static program.

Second, academic education and vocational education must be reconciled to their task of sharing in the training of the modern technician. Our overwhelming technological advancements have led us to the place where professionals are freed from the operation of the machine that performs the routine work, but the technician that does operate that machine, in taking the professional's place, must command basic disciplines as well as the skill requirements for the task he performs. No longer can teacher educators isolate themselves within the vocational field, but now must join forces with the academic disciplines.

Next to the needs of the skilled technician stand equally important, the needs of the semi-skilled worker. Our teacher education programs must include a solution for the needs of those migrating individuals who need, most of all, the semi-skilled training in preparation for a career of ever-changing jobs.

We must also take immediate action to prepare teachers to deal with those persons with the greatest needs as specified in the '68 Amendments. It is our responsibility to challenge teachers to create vocational education programs which will most nearly answer the critical needs of the disadvantaged and intensify their opportunity to gain equal skill benefits.

Teachers must understand and accept the responsibility of being sensitive to the economy into which they will send their students seeking employment. The student must be made aware of the economic system and be made to understand that it is a system of change and only by realizing this will he be able to secure his own future.

Responsibility also must be accepted in a social sense. The teacher educator must realize his contribution to the development of a social conscience in the preparation of teachers.

Then too, there is a new direction in Vocational Education. The responsibility and leadership for vocational programs now belongs to the state and local communities. So, it naturally follows that teacher educators must plan for educating personnel for state and local positions which are now of such prime importance.

This leads to the concern of developing competent leaders, sensitive to the disciplines of behavioral science as well as vocational education and environmental and social change. Leaders are needed who will not isolate themselves in their specialized fields but will tap the economic, social, political, and academic resources in their communities in order to plan goals and create programs that meet as many individual and community needs as possible.

Finally provisions in teacher education need to be revised. The field is far broader than simply training secondary teachers. Rather, there is a critical need for post-secondary teachers as well as for planners, researchers, and curriculum specialists. In addition, teacher education must involve itself with differentiated staffing where many kinds of personnel can contribute to the overall vocational program.

Mr. Beaumont used as references: Smith Hughes; Vocational Act of 1963; Vocational Amendments of 1968; National Commission on Technology, Automation and Economic Progress, Technology and the American Economy; Donald E. Super's "Challenges to Vocational Education During the Decade Ahead;" Vocational Education for the Disadvantaged: Summary of a National Workshop; "A Doctoral Program in Vocational Education as a Behavioral Science" by David Katz.

TEACHER CERTIFICATION FOR THE FUTURE

Bob E. Childers

Dr. Childers, Executive Secretary for Southern Association of Colleges and Schools, analyzed the area of Accreditation in Vocational Education and Certification. There are three topics that closely relate to this theme: (1) Certification, (2) Accreditation, and (3) Professionalization.

The Vocational Act of 1968, differed from previous legislation in that rather than being program centered and operational centered, the emphasis is non student centered and end results centered. Many of the structures that created the dichotomy of the past between vocational and academic education are no longer characteristic of this new Act. The program or the method of the administration of the program is still determined by the state that prepares the plan and the local school board which must also prepare plans. We must look outside the Office of Education for leadership to implement vocational education. One source is the field of teacher education. The Vocational Act of 1963 cannot be implemented unless there is an effective and progressive program of teacher education, there must be an adequate supply of teachers in vocational education to carry out these programs.

In *1895* the Southern Association was created as an association of colleges and institutes of higher schools for the purpose of improving education in the south. The educational opportunity for the majority of students was only through the fourth or eighth grade. Most of the higher level institutes were private institutes established by religious groups and were college preparatory only. One of the problems the association wrestled with during the first meetings was the determination of at what level high school stops and college starts. Since the technological revolution we created institutions known as an "Area Vocational School," a "Trade School," a "Junior College," or "Technical Institute." The accreditation process related to these other programs only if they happened to have been a part of an existing institution preparing for the next level of education.

In 1967 the Southern Association of Colleges and Schools recognized the problem of the new type of institution being created which did not fit within the academic ladder. In many instances the vocational education program was interwoven into the academic program. A group of industry, business and vocational educators requested the trustees of the Southern Association of Colleges and Schools to develop a new program to accredit occupational programs.

The National Commission recently prepared a plan in which they advocated a new system for accreditation occupational education, a plan of categoric accreditation for institutions offering both academic and vocational education, and that each category be the responsibility of a separate commission. The commission on colleges was to evaluate academic programs and collegiate institutions. The commission on secondary schools was to evaluate general education and college preparatory programs. The commission on vocational education was to evaluate the vocational-technical programs in the junior colleges. This commission would recognize high schools with five or more vocational offerings and vocational technical institutes which do not require academic accreditation. Teacher certification requirements indicate that in order for an institution to have a quality program the teacher must be able to teach effectively. The program must be so designed to meet the educational needs of the community. This includes not only those students within the institution but those that are not there as well. There has to be an equal out-reach program as the in-school program.

One of the big weaknesses in vocational education is that certification standards are left to the State Department of Education. It becomes an exclusively in-house process that determines certification standards for themselves. There is no standard among states concerning vocational teachers.

One area of need today is improving teachers of certain technical, trade and industrial fields. Few states require vocational instructors to go back to an industry for an equal period of time to that of his academic preparation. Equal to the importance of our experience within the classroom, is the need for the experience within industry. This need might also apply to the university professor who prepares vocational teachers and the vocational administrators.

We assume that changes must occur in education. Equal to that change is the assumption that we as individuals must change as well.

There are three distinct levels of learning through which an individual goes in order to accomplish a new shell: the perceptionalization level, the conceptualization level, and the generalization level. With the Act of 1917 we went through the perceptionalization period. We identified what we are and what we ought to become. With the Act of 1946 and 1963 we have gone through the conceptualization phase. We have identified that the prime value of occupational education should be the individual, not the institution nor the instructor. Now today in our programs we generalize. The full force of the generalization must occur at the teacher education level. As a part of this process we have to generalize the structure of teacher education to accomplish all these projections.

GEOGRAPHIC COMMITTEE REPORTS

A UNIFIED APPROACH TO EXISTING TEACHER EDUCATION PROGRAMS

Group 1 A

Participants

Arthur Berry
Lawrence DeRidder
N. W. Gates
Barney Myers
Morton Shenker
Charles Templeman
Alfred Patrick, Chairman
Sidney Cohen
Bill Douthat
William Householder
Priscilla Royal
David Sherren
Bertha Wakin
George Wagoner

Position Statement

The passage of the National Vocational Education Act of 1963 and its subsequent amendments of 1968 are viewed as a mandate by those engaged in vocational education to eliminate the fragmentation currently associated with those vocational programs and to strive for unification of the total educational program. Investigation and study by those participating in the National Seminar on Vocational Teacher Education held at the University of Tennessee, August 11-22, 1969, has recognized that there is a need for a unified approach to vocational education and that there are elements, when identified should provide the basis for structuring programs of vocational teacher education. The participants also indicated that along with all areas of education, leadership must be developed within the area of vocational teacher education. This leadership must possess knowledge and competencies in all aspects of vocational education to identify, implement, and administer educational programs which insure the right of each individual to attain his maximum potential.

Objectives of Professional Vocational Education

The objectives of vocational education can be identified as understandings, skills, and attitudes as they relate to the teaching of an area of vocational education and are best stated in terms of behavior. Common objectives of competent teachers are:

1. To develop understanding of Vocational Education with respect to its role in society by:

    a. Communicating effectively through the use of acceptable educational and vocational terminology.

  b. Recognizing the place and nature of vocational programs and offerings within the total educational program, and interrelate the academic and vocational programs.
  c. Analyzing the basic elements of an occupation.

2. To develop skill in the techniques of teaching vocational subjects or areas by:
   - a. Organizing a flexible and relevant instructional program which can meet the skill and knowledge needs of each student.
   - b. Selecting and using appropriate instructional media.
   - c. Preparing and effectively utilizing evaluation instruments appropriate to program goals.
   - d. Organizing and administering instructional facilities.

3. To develop desirable attitudes toward education, teaching, work, worker, and the teaching-learning process by:
   - a. Recognizing and utilizing self-improvement procedures.
   - b. Recognizing the uniqueness of the learner and how individuals learn.
   - c. Recognizing those factors of human behavior which affect achievement and success realizing the importance of successful experiences for developing those attitudes necessary in our world of work.

Strategy to Evolve Unity of Vocational Education

1. Create joint committees of representatives of each service at all association levels to provide cooperative programs among various disciplines in vocational education.
2. Establish a position within each teacher-training institution for the coordination of all vocational teacher-education programs.
3. Identify and develop leaders with effective skills in administering and supervising vocational teacher education on all levels.
4. Identify and implement a common core of professional vocational courses at both the undergraduate and graduate levels.
5. Provide comprehensive workshops, seminars, and practical field experiences designed to familiarize vocational education teachers with people who have special needs, such as the disadvantaged or handicapped.
6. Provide a variety of interdisciplinary in-service experiences and extension courses to improve competency in the professional skills.

7. Develop a long-range career development recruitment plan for attracting vocational teachers.
8. Establish a continuing evaluative program of on-going graduate studies to insure unity, relevancy, and adequacy of programs.
9. Utilize the resources of AVA as a base for a national center to promote and develop a unified approach to vocational teacher education.

Resolution

Geographic Group 1 A in Seminar assembled on August 21, 1969, resolves that this dialogue and approach to unity between the disciplines of vocational education begun at the National Seminar for Vocational Teacher Education at Knoxville, Tennessee, be continued through similar seminar opportunities at both the state and national levels.

A FRAMEWORK FOR ACTION TO HELP SENSITIZE VOCATIONAL TEACHER EDUCATORS TO PROVIDE LEADERSHIP AND GUIDANCE TO TEACHERS

Group 1 B

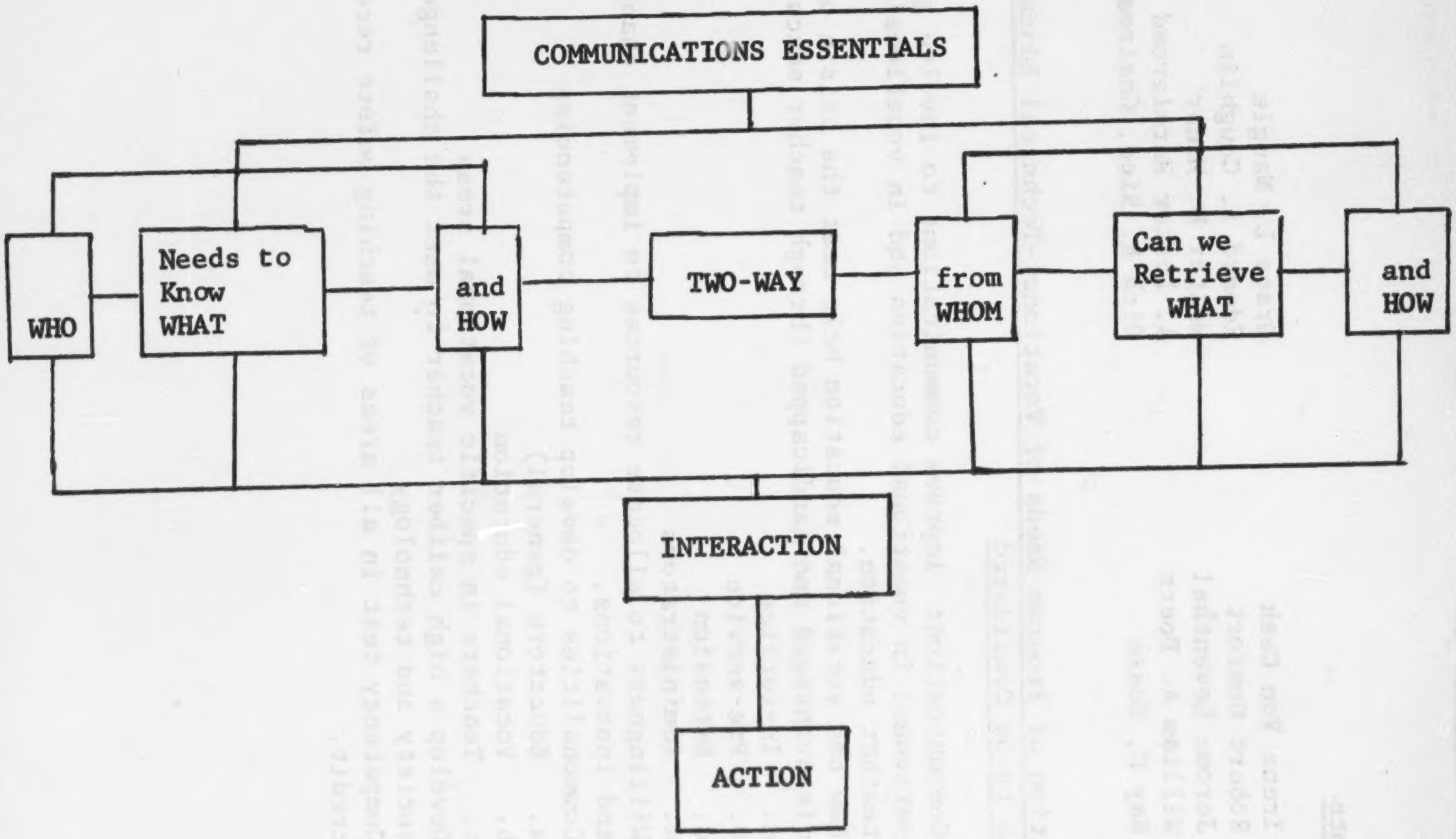
Participants

Irene Von Cseh
Robert Comfort
Jerome Leventhal
William A. Doerr
Ray C. Doane
Grace L. Nangle
Edward J. Coughlin
Walter E. Miner
A. Lester Harkleroad
Dick R. Rice, Chairman

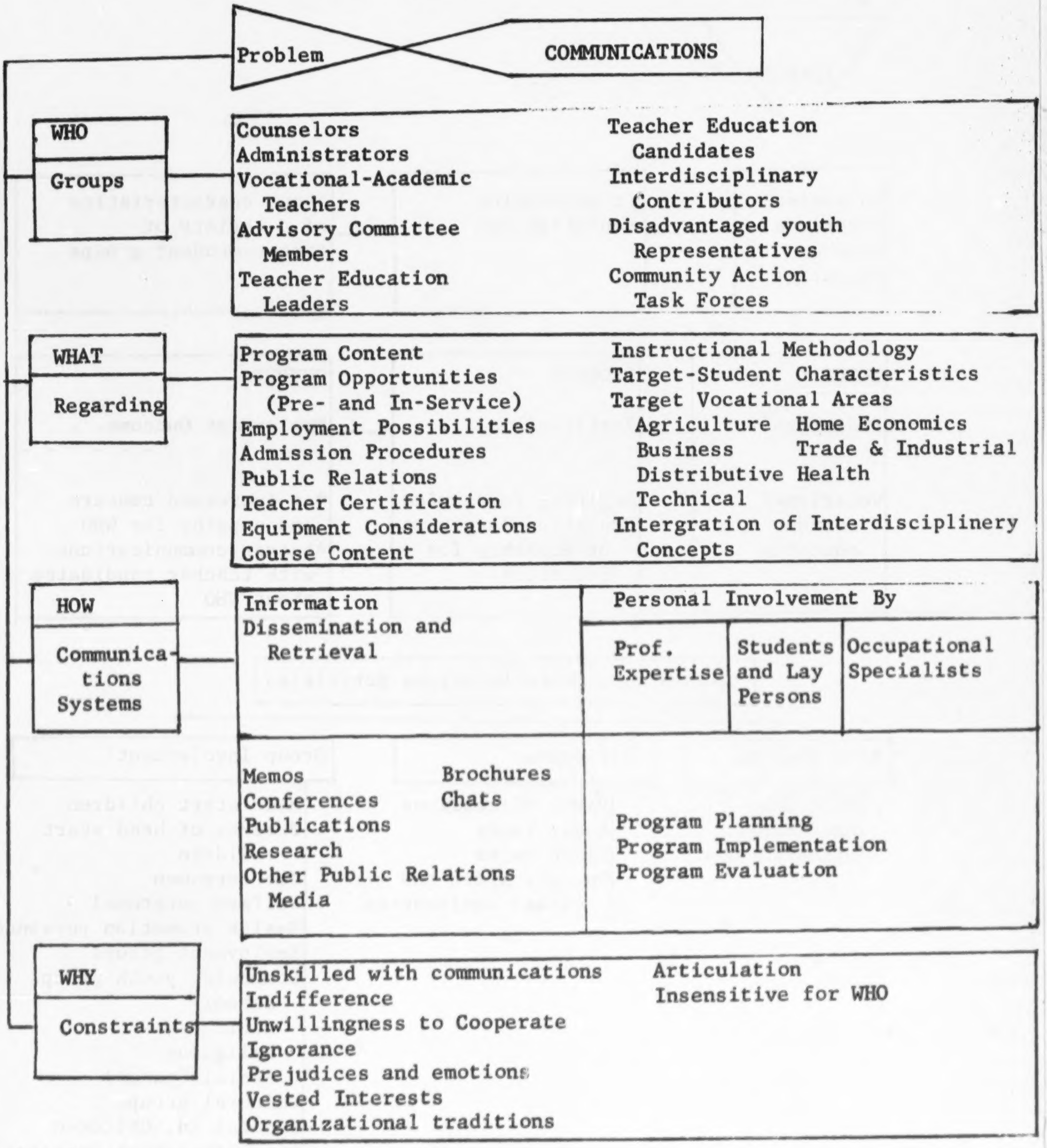
Identification of Program Needs of Vocational-Technical Education And Areas to be Considered

1. Communication: improve communications to involve guidance personnel in vocational education and in vocational teacher education.
2. How can vocational education help meet the crisis of the disadvantaged and handicapped through teacher education?
    a. In-service
    b. Pre-service
    c. Extension
    d. Administrators
3. Willingness to allocate resources to implement changes and innovations.
4. Commonalities to develop teaching competencies
    a. Educators (general)
    b. Vocational education
    c. Teachers in specific vocational areas
5. Develop a high caliber teacher to meet the challenges of society and technology
6. Competency test in all areas of teaching before receiving credit.

MODEL FOCUS: DESCRIPTION OF COMMUNICATIONS PROCESS


COMMUNICATIONS ESSENTIALS
WHO
Needs to Know WHAT
and HOW
TWO-WAY
from WHOM
Can we Retrieve WHAT
and HOW
INTERACTION
ACTION

Model Focus: Analysis of a Complex Problem in Vocational Teacher Education



Problem — **COMMUNICATIONS**

WHO

Groups

Counselors
Administrators
Vocational-Academic Teachers
Advisory Committee Members
Teacher Education Leaders
Teacher Education Candidates
Interdisciplinary Contributors
Disadvantaged youth Representatives
Community Action Task Forces

WHAT

Regarding

Program Content
Program Opportunities (Pre- and In-Service)
Employment Possibilities
Admission Procedures
Public Relations
Teacher Certification
Equipment Considerations
Course Content
Instructional Methodology
Target-Student Characteristics
Target Vocational Areas
  Agriculture
  Business
  Distributive
  Technical
  Home Economics
  Trade & Industrial
  Health
Intergration of Interdisciplinery Concepts

HOW

Communications Systems

Information Dissemination and Retrieval

Personal Involvement By

Prof. Expertise	Students and Lay Persons	Occupational Specialists

Memos
Conferences
Publications
Research
Other Public Relations Media
Brochures
Chats

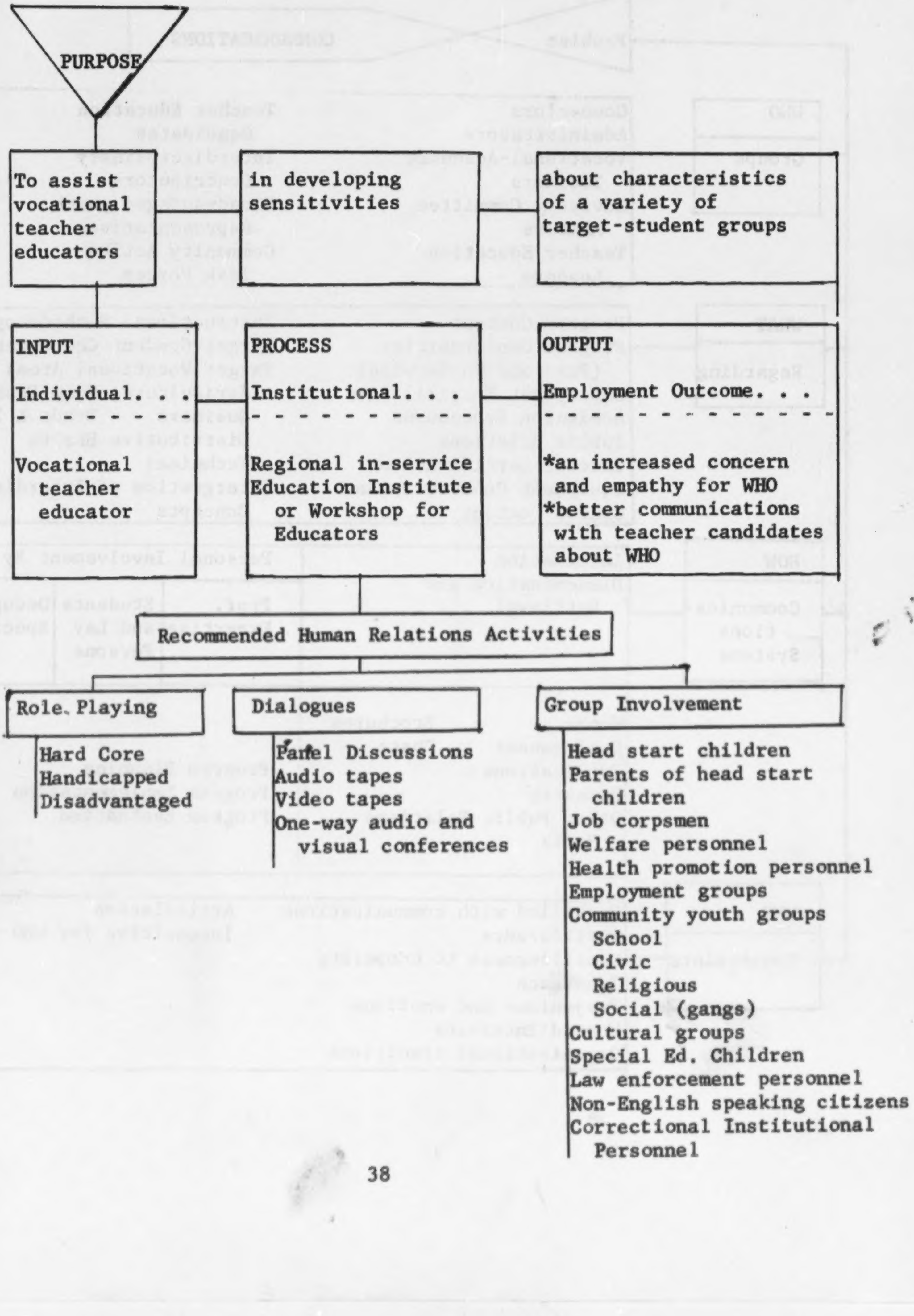
Program Planning
Program Implementation
Program Evaluation

WHY

Constraints

Unskilled with communications
Indifference
Unwillingness to Cooperate
Ignorance
Prejudices and emotions
Vested Interests
Organizational traditions
Articulation
Insensitive for WHO

Model Focus: **Proposed Structure of a Sensitivity In-Service Education Program for Vocational Teacher Educators**


PURPOSE
To assist vocational teacher educators
in developing sensitivities
about characteristics of a variety of target-student groups
INPUT
Individual. . .
Vocational teacher educator
PROCESS
Institutional. . .
Regional in-service Education Institute or Workshop for Educators
OUTPUT
Employment Outcome. . .
*an increased concern and empathy for WHO
*better communications with teacher candidates about WHO
Recommended Human Relations Activities
Role Playing
Hard Core
Handicapped
Disadvantaged
Dialogues
Panel Discussions
Audio tapes
Video tapes
One-way audio and visual conferences
Group Involvement
Head start children
Parents of head start children
Job corpsmen
Welfare personnel
Health promotion personnel
Employment groups
Community youth groups
School
Civic
Religious
Social (gangs)
Cultural groups
Special Ed. Children
Law enforcement personnel
Non-English speaking citizens
Correctional Institutional Personnel

Problem Under Consideration

1. A primary goal of United States education is to meet educational needs of all Americans.
2. Vocational educators have long maintained that they provide adequate education for all who have completed their program.
3. Vocational teacher educators have trained vocational teachers adequately to meet the needs of average students but certain groups have not been reached.
4. Very few culturally or socially deprived and physically or mentally handicapped have been included in existing programs.

Therefore, their model provides a framework for action to help sensitize vocational teacher educators to provide leadership and guidance to teachers who in turn can develop and implement local programs to meet the needs of special groups not now served.

Recommendations as to how to Sensitize the Vocational-Technical Profession: Special Needs of Handicapped and Disadvantaged Students

1. It is proposed that U. S. Office fund four institutes for vocational and technical teacher educators chosen from states having common problems in dealing with handicapped and minority population. Example of one group: Representatives from Maine, New Hampshire, Vermont, Utah, Nevada, and Idaho.
2. Resource people for the conference should include people like:
    a. Chief of Police, Atlanta, Georgia
    b. Sociologist, Robert Havinghurst
    c. Psychologist, Kenneth Clarke
    d. Elie Cohen, National Youth Employment, New York.
    e. Morris Abrams, President of Brandies University
    f. Robert Campbell, Director of Disadvantaged Center, Columbus, Ohio
    g. Sam Shepherd, St. Louis City School Ranking Member from_______________.

SMALL GROUP ACTION REPORTS

GUIDELINES FOR CHANGE IN VOCATIONAL TEACHER EDUCATION

Group 2A

Dr. Conan Edwards, Chairman, Richard Almarode, Co-Chairman. Representatives from Agriculture, Business Education, Distributive Education, Health Education, Guidance, Office, Trade and Industrial and Technical Education.

Focus

Guidelines for change in vocational teacher education--concerned with the "who." Guidelines for advancing inservice and graduate education in vocational education which would lead to developing leaders in vocational education. What changes should be made in vocational education programs at the pre-service level?

Participants

George Vanover
Earl Carpenter
Herman Borroughs
R. A. Phillips
Richard Almarode
Dr. Conan Edwards
John Jackson
Elmo Johnson
(Dr.) Mrs. Lillie Robinson
W. W. Bearden
Carroll Coakley

Liberal/General Education (35 - 40%)

Professional Education of Vocational Education Teachers (60 - 65%)

1. Occupational Experience Credit and Special Fields (45-50%)
2. Interdisciplinary--Behavioral Science (10%)
3. Commonalities within Vocational Education (5%)

The institution should decide and award occupational experience where applicable. The institution/department is left to determine how this will be set up and implemented. Courses required in a special field should be decided within that field.

Courses taught through the interdisciplinary approach should include:

School-community relations
Human growth and development
Principles of learning (note: special learning problems).

General Evaluation
A course about the disadvantaged

Courses taught through a commonalities approach should include:

Principles and philosophy of vocational and occupational education (Note: history, policies, etc. included)

Principles of vocational guidance (guidance for vocational teachers)

Administration and organization of vocational education (should be offered at graduate level).

The course which should focus upon the special needs of the handicapped and disadvantaged students should:

1. Provide appropriate experiences for teachers of students with special needs.
2. Provide field experiences or simulated field experiences for teachers of youth with special needs.
3. Utilize community social service agencies such as vocational rehabilitation centers, welfare agencies, employment agencies, religious organizations and ethnic groups.
4. Use handicapped or disadvantaged workers to provide first-hand experience for teachers-trainees. This experience could be provided through person-to-person contact, classroom presentations or other direct contact with disadvantaged or handicapped persons.
5. Select and use appropriate methods of teaching youth with special needs.
6. Provide the teacher trainee with the opportunity to gain realistic experiences in areas with the greatest need. Exposure to this area of education should be in the early stages of teacher preparation.
7. Keep in touch with social changes and adapt accordingly.
8. Be student oriented as well as subject oriented.
9. Develop interhuman relationships and interest in working with disadvantaged and handicapped students.

This course should be placed and offered in the interdisciplinary phase of the vocational education of the student.

Special Notes

1. Design programs for the people involved.

2. Involve all three domains (and include the advanced levels in each) in teacher education programs.

3. As a means of improving teaching, provide opportunities for students to go to learning labs. To view video tapes (if available) in subject areas of vocational education.

4. Persons involved in differentiated staffing

   a. Professional
      (1) Local vocational education coordinator or systems director
      (2) Cooperating teachers and other vocational teachers
      (3) Researcher, social workers, psychologist
      (4) Counselor
      (5) Special needs teacher

   b. Non-Professional
      (1) Teacher aid
      (2) Teaching assistant

5. Arrive at specific credit for occupational experience through

   a. Written tests of the cognitive areas
   b. Psychomotor skills tests (where applicable)
   c. Past performance (subject evaluation of former employers, etc.)
   d. Oral examination

Developing graduate education in vocational education for leadership positions in vocational education.

1. Objectives of a master's program should focus upon

   a. Personal development of the individual
   b. Understanding of total program
   c. Understanding of people involved.
   d. Flexible graduate programs.

2. Experiences which a master's program for leadership positions in vocational education should provide

   a. Leadership internship
   b. Core experiences
   c. Courses which will develop the person into a leader. Possible courses would involve.

(1) Political involvement
(2) History and philosophy of vocational education (core)
(3) Administration and supervision
(4) Knowledge of total program
(5) Special field courses
(6) Understanding people
(7) Advanced methods including research
(8) Leadership training
(9) Group dynamics

Guidelines for Implications for Inservice Education

1. Give attention to encounter group sessions.

2. Coordinate with the State Department of Education and local level.

3. Involve more innovation in inservice education.

4. Involve students by seeking out their interests along the lines of course offerings.

5. Obtain feedback by seeking out evaluations of the program or course(s) from students who had completed the course or program.

6. Initiate some inservice education at the national level. Teacher improvement, occupational competencies, professional competencies, and personal qualities could be considered at this level.

7. Involve more general educators in vocational education programs by offering courses in vocational education on the master's level.

COMMONALITIES IN VOCATIONAL TEACHER EDUCATION

Group 2 B

Participants

Lowery Davis, Chairman	James Atherton
Wilfred Bates	Annelle Bonner
Marvin Brown	Dolph Camp
Larry DeRidder	Robert Hilliard
Thelma Leonard	B. Ramakrishna

Each member gave a brief report of accomplishments in special area meetings last week.

Following some discussion, the group identified as a broad objective to explore these areas of concern:

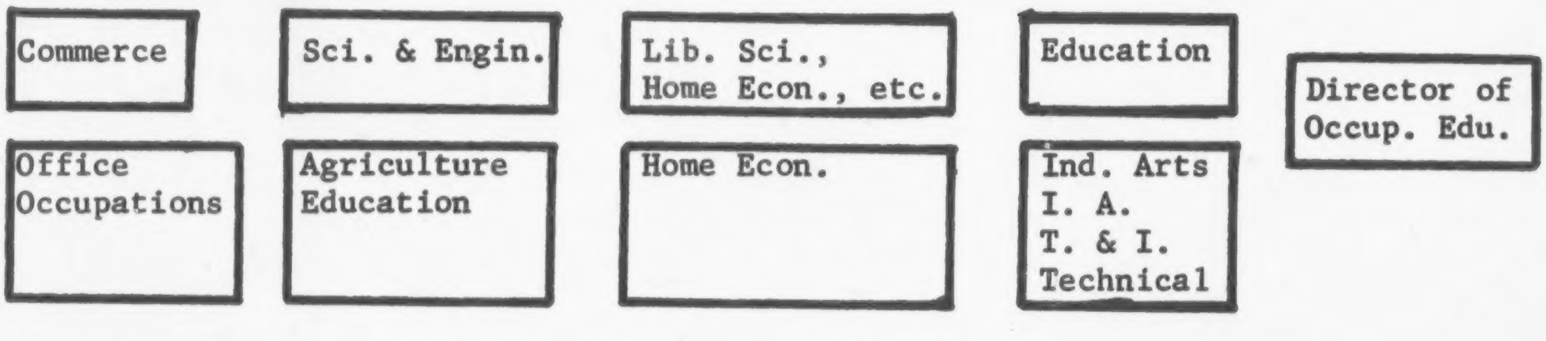
1. Core concepts (determine commonalities)
2. Teacher needs (competencies)
3. Special needs
4. Administrative organization

Discussion of these objectives led to further breakdowns and to committee assignments as shown:

1. Core concept commonalities - Bonner, Brown, Rama
2. Programs for preparing teachers for special needs areas - Bates and Davis
3. Pre-vocational teacher preparation - Camp and Hilliard
4. Professional improvement - Atherton and Leonard
5. Administrative organization - Bates and Davis

During the second day of discussions, the group analyzed a real administrative organization situation and identified probable problem areas. Suggestions for change to achieve more effective administration were made and discussed.

The current structure is as shown, beginning with the deanship level:


Commerce
Sci. & Engin.
Lib. Sci., Home Econ., etc.
Education
Director of Occup. Edu.
Office Occupations
Agriculture Education
Home Econ.
Ind. Arts
I. A.
T. & I.
Technical

The suggestion which was discussed at length was the pulling together of the various departments (second level blocks) into a Division of Occupational Education with a director and with major responsibility to the Dean of the College of Education. Specialized disciplines would continue to cooperate in providing subject matter courses.

During the continued discussions, reports were heard from the small committee groups. Following changes indicated by the group, reports were revised and refined and accepted for inclusion in this report. Copies of the reports are attached.

PREVOCATIONAL EDUCATION PHILOSOPHY AND APPLICATION

Introduction

Within the general philosophy of vocational education there appears a persistent and common ideal which is to inform and be well informed: to make applications and be able to apply. There appears to be no reasonable justification not to apply this same philosophy and application to the areas of prevocational teacher education and to the student that participates in the program regardless of the applied learning level.

This we believe: All men labor--there is only the distinction of how and for what. This statement being acceptable, then within the occupational responsibilities of education there must exist a need for the identification of these occupations and the realization of the world of livelihood. This world of livelihood is both a physical and mental participation of all it's citizens. The informing and guiding of an individual through real and possible pseudoexperiences of what his society has to offer may be the force that may push toward total individual self-actualization.

This we can do: The application of the principles involved in prevocational education may be administered in several practical options.

1. That educational guidance personnel work with an advisory panel of vocational, labor, business, and civic representatives for developing a total prevocational program beginning in elementary education through post high school.
2. That established programs of vocational education establish the means and media for exposing and informing through a formal program for all students in public education (elementary through post high school).
3. That a variety of real or pseudoexperiences be developed for student participation beginning in elementary through post high school.

Specific Proposal

These options as described are noticeably aimed toward current functioning groups that heretofore have operated mainly as independent bodies with enclosed independent sub-bodies. Any one of these options might generate greater division among educators. Therefore, a proposal may be justified in generating a new prospectus toward unifying each of these groups into a specialized teacher coordinator. There should be a coordination of all three options as previously mentioned.

Qualifications

This person may be developed from any one of the vocational services, providing one has a degree; or, a person may have a degree in education and gain his work experience as he functions in the system.

Training Institution

Further recommendations are that the teacher training institutions develop a curriculum on the undergraduate level that provides for certification for teaching various levels. This may possibly be a joint coordinated offering between elementary and secondary education and vocational education curriculums. Preteacher training experiences should be provided in exploring various occupational fundamentals. These exploratory experiences might be of the traditional concepts (Industrial Arts or practical arts) or developed through paid industrial resource persons that may be identified by the prevocational teacher training coordinator of the training institution. There also may be need for some guidance and counseling background for a better working relationship with local guidance personnel.

Conclusion

There are many other specific guidelines for the development of a prevocational teacher coordinator training program. However, there is strong support for what is presented in this report. There is only the intent of this report to establish guides for some unification of direction for the fullest development of our national human resources.

Some further questions:

1. What are the occupations?
2. What is the function of guidance?
3. Who is going to teach at what level?
4. What kind of experiences are needed in elementary?
5. Where will the time come from at each level?
6. How is administration structured about this prevocational teacher?

COMMONALITIES IN VOCATIONAL TEACHER EDUCATION

We believe that there are common elements that may be taught for all vocational teacher educators. We believe that at the undergraduate level major emphasis needs to be devoted to the various subject matter areas to prepare the most effective teacher possible and that the teaching of common elements on a unified basis is best achieved at the graduate level and in in-service programs.

The following elements might be taught simultaneously to all vocational teachers:

1. History and Philosophy of Vocational Education
2. Psychology or Theories of Learning
3. Educational Media (use of)
4. Organization and administration of vocational education programs
5. Program planning
6. Public Relations
7. Research
8. Vocational Guidance (at the graduate and/or undergraduate level)

It seems to us that these common elements could best be implemented through graduate courses and in-service programs at the graduate level.

PROFESSIONAL IMPROVEMENT

This we believe:

1. Professional improvement is essential for an up-to-date program in vocational education.
2. Teachers need to continually up-date themselves.
3. Administrators should make provisions for and encourage individual teachers in a continuous program of professional development to participate.

Professional improvement of teacher trainers is essential for a viable ongoing program of vocational education. The quality of teaching at all levels is directly related to the degree to which instructors keep abreast of existing and changing conditions in society. Involvement in the activities listed will assist in bringing about desired professional improvement.

This we can do:

1. Plan and participate in local, area, district, state, and national conferences.
2. Participate actively in preparation and revision of curriculum materials.
3. Cooperate with state staff in determining teacher needs and make a coordinated effort to provide for meeting these needs.
4. Unite the efforts of all teacher educators in the state in one service to offer educational programs throughout the state.
5. Bring in specialists from industry, education, business, etc. to give insights and impetus to the program.
6. Assist in the establishment and maintenance of exemplary centers for demonstration models.
7. Assemble and disseminate educational media and research.
8. Involve teachers in the utilization of educational media and research.
9. Support actively professional organizations.
10. Be good examples as professional teachers.
11. Provide educational experiences through a variety of means such as:
    - Credit course--regular term, short courses, extension
    - Noncredit courses--on and off campus, state wide, area and local
    - Professional meetings--at all levels
    - Professional publications--newsletters.
12. Keep school administrators and supervisors up to date on programs.
13. Continually up-date content and methodology, respect the intelligence of the student, and reflect current research.
14. Coordinate interdepartment faculty in development of course content.

TEACHER EDUCATION FOR YOUTH AND ADULTS WITH SPECIAL NEEDS

We believe that vocational teacher education for teachers of youth and adults with special needs should be the joint responsibility of all vocational services. By working together with special education, sociology, psychology, and vocational rehabilitation, vocational teacher educators can provide a valuable link in meeting the needs of handicapped and disadvantaged people. Basic education and/or adult education departments within the State Departments of Education as well as all federal programs can provide valuable services.

We are unamious in agreement that this area of discussion is highly important and should receive much attention. As vocational teacher educators, we must become more knowledgeable on the disadvantaged before specific suggestions for the implementation of a program of teacher education can be recommended.

AN EXAMINATION OF VOCATIONAL TEACHER PREPARATION PROGRAMS

Group 2 C

Participants

Mary Jim Combs
Mary Faulkinberry
Donald Riggs
Wallace Sexton
Clyde D. Ware
Randolph Nelson, Chairman

John W. Devine
John Patterson
Oliver Robinson
James Simpson
George Wiegers

Problem Area A: **Some college educators do not maintain a continuing dialogue with vocational teachers and lack empathy for the "real" world of the classrooms in elementary and secondary schools.**

Suggestions

1. Provide opportunities for teacher educator to teach and work with students below the college level periodically and for short periods of time. (e.g., two or three weeks might be enough time for many college professors to regain a feeling for the teacher's situation.)
2. Use teachers from schools to help teach methods courses in college.
3. Collect and utilize both video and audio tapes of critical incidents among public school students in vocational education programs for use in maintaining familiarity with problems, solutions, procedures, etc.
4. Have adequate audio-visual equipment (projectors, recorders, etc.) readily available for use by both college staff and college students. (This is necessary for the implementation of suggestion number 3.)
5. Provide more opportunities for working with students on an individualized basis.
6. Use advanced students as aids to instructor.
7. Provide more and improved communication among counselors and teachers and counselor educators and vocational teacher educators.

Problem Area B: Certification requirements for teaching vocational Education need to be examined and improved.

Suggestions

1. A balance should be maintained between occupational experience and professional course work.
2. Certification requirements could be used to stimulate a "broadening" of specializations to encompass new technological areas or combinations which have become more suitable for today's world. (e.g., one current need is to encourage vocational argriculture teachers to "broaden" to include agri-business.)
3. Some vocational education areas use proficiency tests as part of certification procedure. In view of technical courses development and study of suitable proficiency standards for use as part of certification should be initiated.
4. An investigation of other possible sources for certification standardization and regulation should be innaugurated. Such possibilities could include professional societies and organizations, independent agencies, and institutions of higher education.
5. A need exists for additional endorsements in specialized areas of vocational education.

Problem Area C: Communication problems are a serious deterrent to cooperative efforts of vocational education teachers.

Suggestions

1. Many current activities are prompted through rivalry rather than through understanding and cooperation. More emphasis upon human relations processes in teacher preparation programs might be instrumental in changing this situation.
2. Some vocational education trainees jobs depend to a great extent upon their abilities to work with other people than on the job skills. (e.g., motel-hotel maids, child-care specialists, etc.)
3. Speciality groups should attempt to develop common termonology. (e.g., the word "coordinate" may usually imply coordination of information to one group yet mean coordination of equipment to another group.)
4. Agreement upon a core area of subjects and increased emphasis on the coordinative process could alleviate some common problems. Suggested areas which might provide a core for vocational education follow:

   a. Philosophical foundations of vocational education.
   b. Organization and administration of vocational education programs.

   c. Occupational analysis and its relevance for vocational education.
   d. Public relations and professional ethics in vocational education.

5. Improved methods of exchanging materials and information among vocational education teachers would enhance communication considerably. Some suggestions for facilitating such exchanges follow:

   a. Use a national organization such as AVA to index materials.
   b. Use current programs such as that of the American Association of Agricultural Engineers and Vocational Agriculture as models for joint programs to produce and disseminate vocational education materials.
   c. Give a wider orientation to the ERIC system.
   d. Make better communication exchanges necessary for succeeding in preparatory programs.
   e. Delegate responsibilities in large or complex departments so that a designated person has the responsibility for coordinating programs, seeking information, etc. with local, state, and national agencies.
   f. Establish coordinated programs among specialities (i.e., electronics instructors develop a state coordinated program.)
   g. Provide for more dialogue sessions among local, state, and national businesses and industries.
   h. Reduce student-teacher ratio to a level which allows real communication between the two.

Problem Area D: Product Evaluation

The following list of strengths in vocational education provide some guidelines for consideration of evaluating the vocational education product.

1. Vocation educators are more interested in the individual than are most educators in the more traditional academic areas.
2. The vocational education curriculum provides more opportunities for individual attention, programming, and consideration than most other curricula.
3. More club activities are provided and engaged in through vocational education.
4. Smaller classes are the rule rather than the exception in vocational education.
5. The motivation and rewards in vocational education are very real and tangible to young men and women.

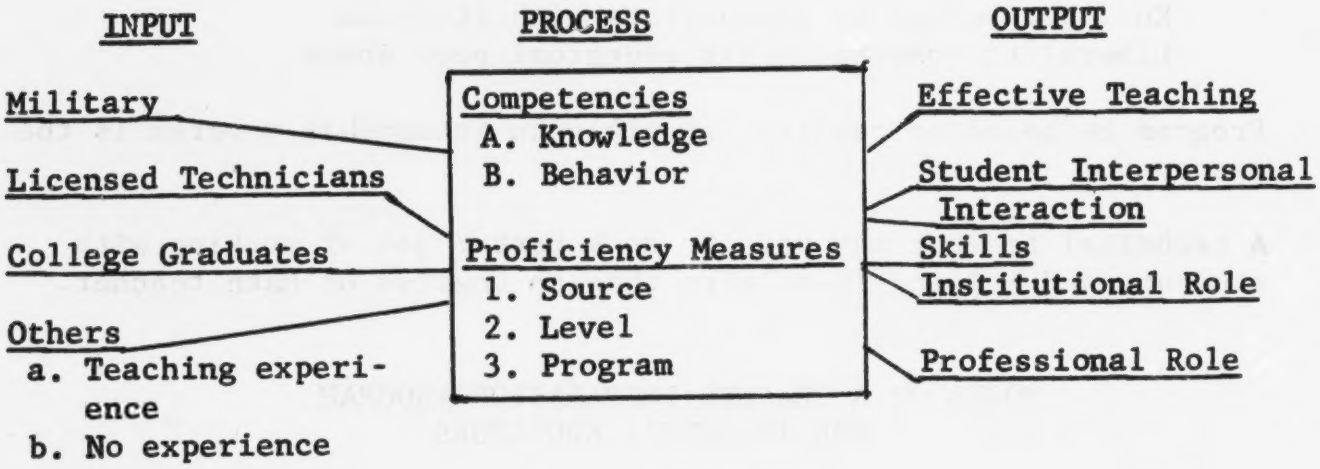
The following questions are suggested to stimulate action for future vocational teacher education planning.

1. Do vocational education teachers have as much enthusiasm for their profession as the above strengths suggest they should have?
2. Are vocational educators more enthusiastic at conventions and work-shops than in the schools and colleges?
3. Do we need more in-service training? A different approach to in-service training? A better model for in-service training?
4. Should all education be career centered? Should vocational education begin in elementary school? Should vocational and educational guidance be separated as if they were really distinct entities?
5. If state funds for vocational education programs were discontinued would colleges continue vocational education programs?

Assumptions

1. If the person has the competency, certify him/her.
2. Build on what has been done in the past and proceed from this point.
3. "Societal" conditions effect preparation of teachers in a variety of ways.
4. The design of a model must take into account:
    a. Personal feelings (individual differences, he is a human being)
    b. Psychology of learning,
    c. The relationship of his particular technical competency to a variety of other areas, i.e., humanistic values prove all philosophy.
5. Any plan for the preparation of teachers should have built in flexibility.
6. We have assumed in the past that anyone who passes competency in a trade, occupation or industrial pursuit, can teach if we give him a course in methods, analysis, etc. Can they and are they?
7. Technical competency does not preclude social competency.
8. Long range programs should aim at a Baccalaureate degree.
9. A major problem is keeping up with your technical area while teaching and are working toward a degree. Cooperate with industry.
10. Preparation for teaching, degree and in-service should also include at least some preparation for administrative positions.

11. Teacher preparation programs must be flexible in nature allowing for strengths and weaknesses of the individual. One prescription does not work for all illnesses.
12. Futural programs must allow, encourage and even demand that teachers keep up with the particular area of competency.
13. The preparations of teachers must include counseling, pre-servical and in-servical, possibly a board or group. In a degree program this should cut across disciplinary lines.
14. Technical education is post-secondary.
15. A program of teacher preparation must be purposefully planned.


INPUT
PROCESS
OUTPUT
Military
Licensed Technicians
College Graduates
Others
a. Teaching experience
b. No experience
Competencies
A. Knowledge
B. Behavior
Proficiency Measures
1. Source
2. Level
3. Program
Effective Teaching
Student Interpersonal Interaction
Skills
Institutional Role
Professional Role

1. Source - Where did he get it?
2. Program - What will you do if he doesn't have proper proficiency?
3. Area of Competencies
    a. Discipline
    b. Organization
    c. Presentation
    d. Nitty Gritty
    e. Attitude
4. Behaviors
    a. Proficiency Levels --A B C D
    b. Evaluation Device
        (1) Written
        (2) Oral
        (3) Performance
        (4) Fire
5. Knowledge
6. Source of Knowledge
7. Alternate Programs

Curriculum

1. Humanities -- Related relevant education
2. Social Science
3. Natural Science
4. Teaching Theory
5. Teaching skills techniques
6. Education fundamentals
7. Communications

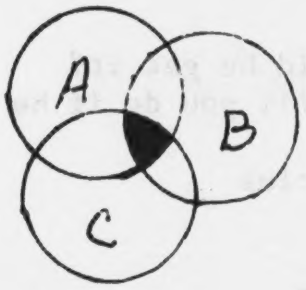
A Teacher Needs:

Must want to become a teacher
Know how to teach
Know how better to communicate with students
Liberal to compete in his pedogical peer group

Program be based on reality, possibly an internship program is the answer.

A technical teacher may have to do a better job of working with students and helping them learn than an English or Math teacher.

MODEL OF A TEACHER PREPARATION PROGRAM FOR TECHNICAL EDUCATORS



A. Technical Competence

B. Teaching Competence

C. Needed assistance in combination of A & B
Area in which teacher training should concentrate.

IDENTIFYING CURRICULUM CONTENT

Group 3 A

Participants

Leon Boucher	June Cozine
William Hamilton	James Karnes
John Mattingly	Earl Mills
Arnold Freitag, Chairman	Robert E. Scott

Problem

Identify the characteristics of the people who are now and who are anticipated to be the target population for vocational teacher training.

1. Personal characteristics of the people.
    a. Interested in the field of vocational education.
    b. Have demonstrated some degree of skill or knowledge of an occupational area.
    c. Have demonstrated an obvious interest in teaching.
    d. Realize the social obligation of the teacher.
    e. Are interested in the opportunities and potentials for new workers in the field.
    f. Have a genuine concern of understanding with the levels of ability, experience, and potential as well as the entry and continued progress of youth and adults in the world of work.
    g. Are interested in enhancing their competencies in areas of personal occupational interest.

2. The background of these people represent those
    a. Academic transfers from other majors and institutions.
    b. Embarking on second careers and coming from:
        (1) Education
        (2) Military
        (3) Industry
    c. Starting a career as a vocational teacher.

3. The physical characteristics include those who may have

   a. Physical handicaps
   b. Exceptional abilities

4. The people will also be representative of a wide variety of cultural, economic and political experiences which may have fortified values and prejudices.

The nature of students that are, or may be outputs of the problem.

Social Competence

1. The teacher should be technically, professionally and socially competent.
2. The teacher should recognize individual differences and needs.
3. The teacher should bring about desirable behavioral changes in students.
4. The teacher should demonstrate competent communication skills with students, parents, faculty, administration, and individuals in the world of work.

Technical Competence

1. The teacher should be technically competent in the area in which he teaches.
2. The teacher should be knowledgeable of opportunities for entry and advancement in the vocational area.
3. The teacher should possess occupational experience in the area he teaches.
4. The teacher should facilitate the adjustment of the student in the world of work.
5. The teacher should have knowledge and understanding of the ways and means of keeping technically up to date.

Professional Competence

1. The teacher should demonstrate competency in teaching methodology.
2. The teacher should participate in local, state, and national professional and technical organizations.
3. The teacher should possess the ability to work with community resources in all aspects of promoting a strong program.

BELIEFS CONCERNING VOCATIONAL TEACHER EDUCATION

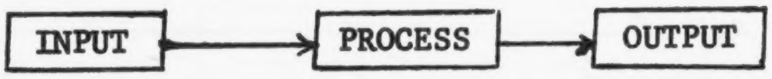
Group 3 B

Participants

Carl Bartel, Chairman
Ronald Frye
Richard Green
Charles Martin
Alvin Sarchett
James Albracht
Louis Graziano
Edward Hill
Richard Peterson

Beliefs

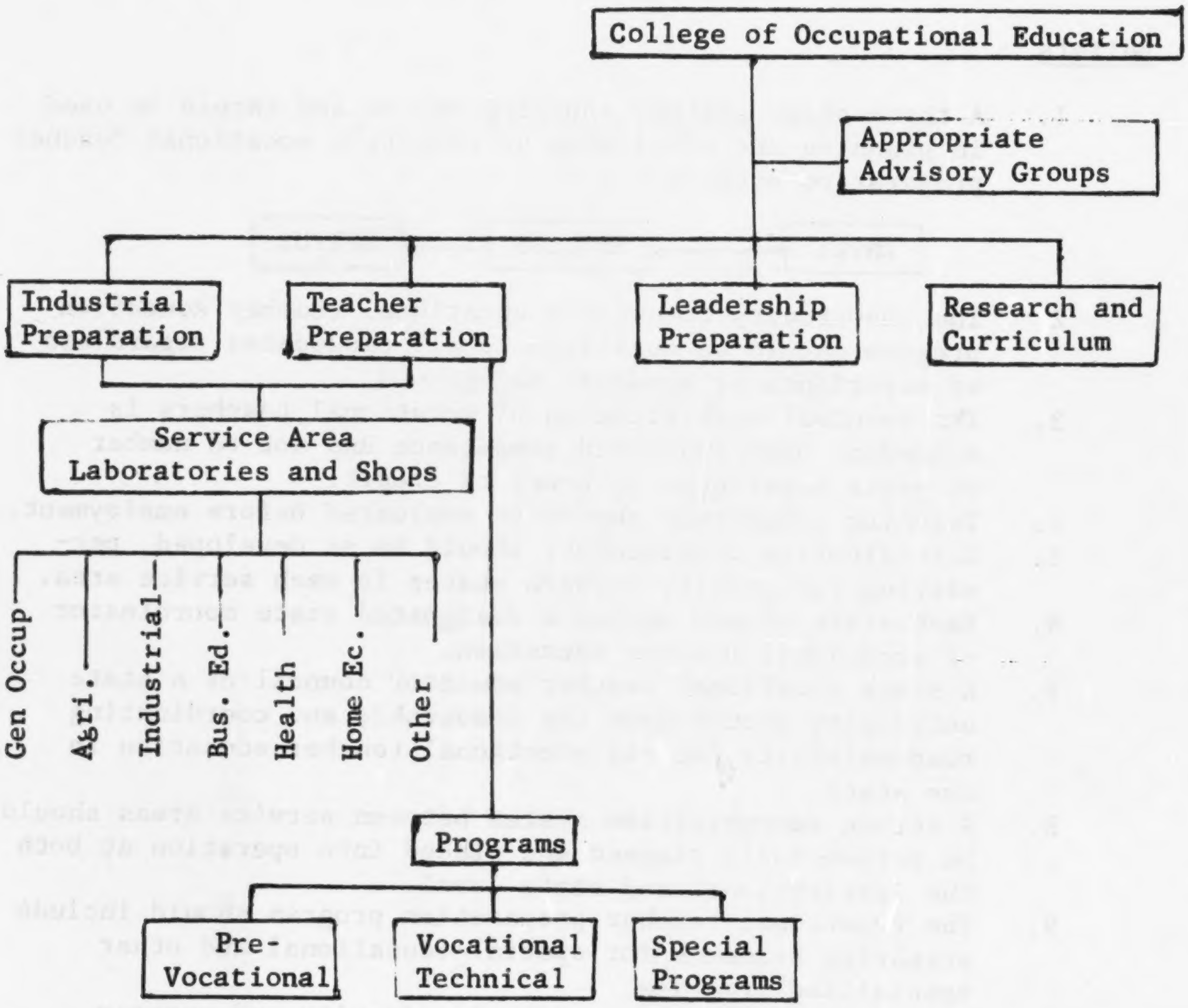
1. A three-stage systems approach may be and should be used in planning and developing an effective vocational teacher preparation program: i.e.



2. The opportunity to enter a vocational teacher education program should be available to all candidates regardless of experience or academic background.
3. The eventual certification of vocational teachers is dependent upon evaluated competence and not on number of years experience or hours of credit.
4. Teaching competence should be evaluated before employment.
5. Certification requirements should be so developed, permitting reciprocity between states in each service area.
6. Each state should employ a designated state coordinator of vocational teacher education.
7. A state vocational teacher educator council or a state university should have the leadership and coordinating responsibility for all vocational teacher education in the state.
8. A strong communication system between service areas should be purposefully planned and placed into operation at both the institutional and state level.
9. The vocational teacher preparation program should include preparing teachers for special educational and other specialized programs.
10. The vocational teacher education faculty and program facilities within an institution should be organized so that it is a single unit at an appropriate level in the organizational structure within that institution.

11. A need exists for cross-discipline approach in vocational teacher education.
12. There are common elements in the vocational teacher educational programs of each of the service areas.
13. The vocational teacher education program should be based on relevant experiential learning.
14. As is the case with vocational training programs, vocational teacher preparation must be relevant to the needs of society.
15. The majority of professional vocational teacher education courses should be "team taught."

INSTITUTIONAL ORGANIZATION


College of Occupational Education
Appropriate Advisory Groups
Industrial Preparation
Teacher Preparation
Leadership Preparation
Research and Curriculum
Service Area Laboratories and Shops
Gen Occup
Agri.
Industrial
Bus. Ed.
Health
Home Ec.
Other
Programs
Pre-Vocational
Vocational Technical
Special Programs

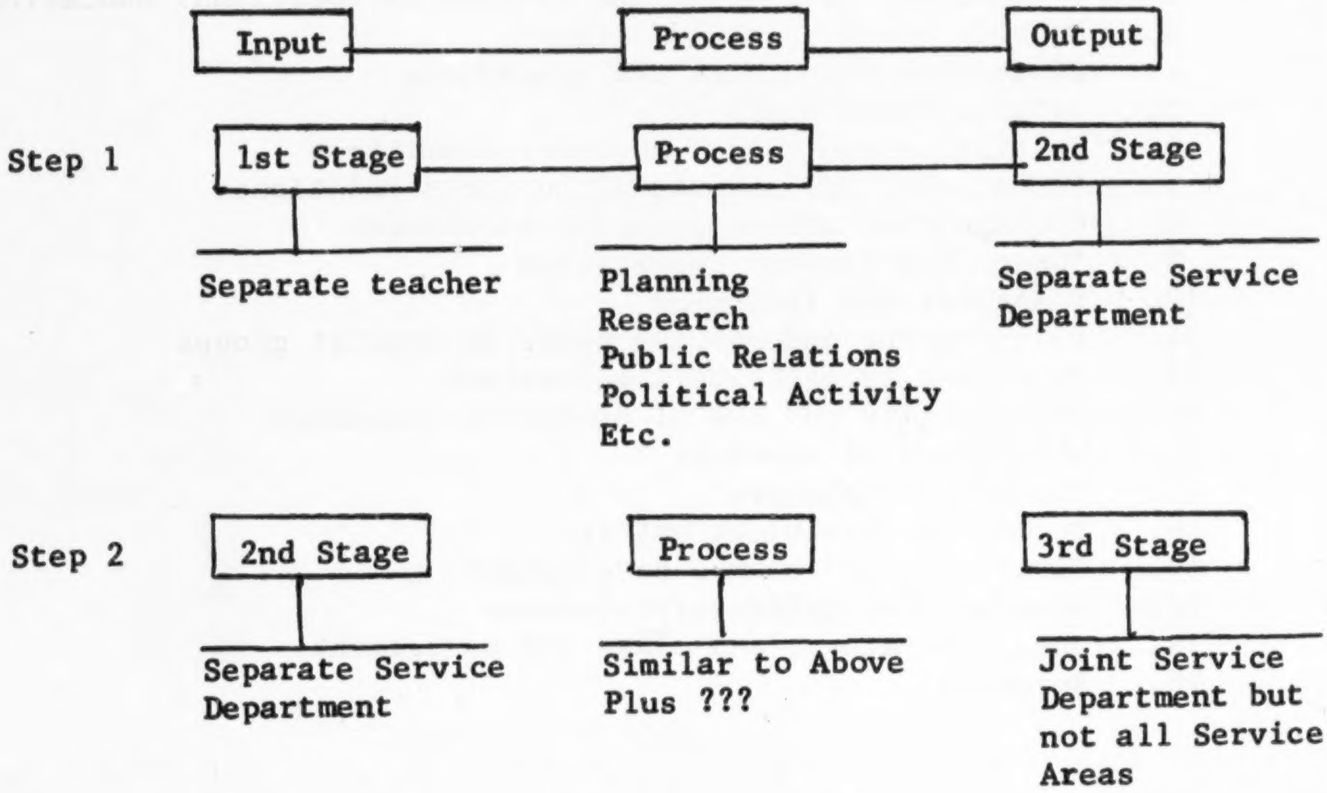
Considerations

1. A state vocational teacher educators council or a state university and coordinating responsibility for all vocational teacher education in the state.
    - a. A state vocational teacher educators council should include representation from each of the teacher education institutions and the state teacher educator coordinator.
    - b. A state university should be one offering a program of vocational teacher preparation.

2. State department support to include appointment of a state teacher educator coordinator and appropriate advisory groups.
3. Highly desirable for teacher educators, technical and professional, to have joint appointments with pertinent other university faculties.

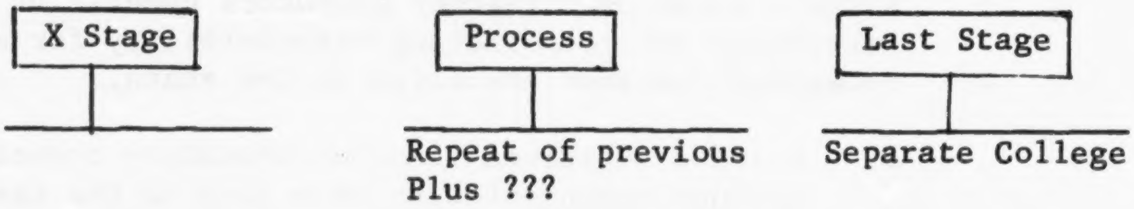
Implementation

Implementation of the movement from the characteristic complete diversity of service areas to the ultimate (ideal) goal of a single, separate college of occupational education will be dependent upon the individual circumstances. The movement procedure should make use of the three-state system approach in planning and carrying out the development to completion.


Input
Process
Output
Step 1
1st Stage
Process
2nd Stage
Separate teacher
Planning
Research
Public Relations
Political Activity
Etc.
Separate Service Department
Step 2
2nd Stage
Process
3rd Stage
Separate Service Department
Similar to Above Plus ???
Joint Service Department but not all Service Areas

Implementation Continued

Step X



The possible sequence that might be followed from input to output in establishing a separate college of occupational education includes six general steps:

1. Separate teacher educator, not department related
2. Separate vocational service department
3. Joint service department, not all vocational areas
4. Department of all vocational service areas
5. Division of occupational education
6. College of occupational education.

Commonalities (Competencies)

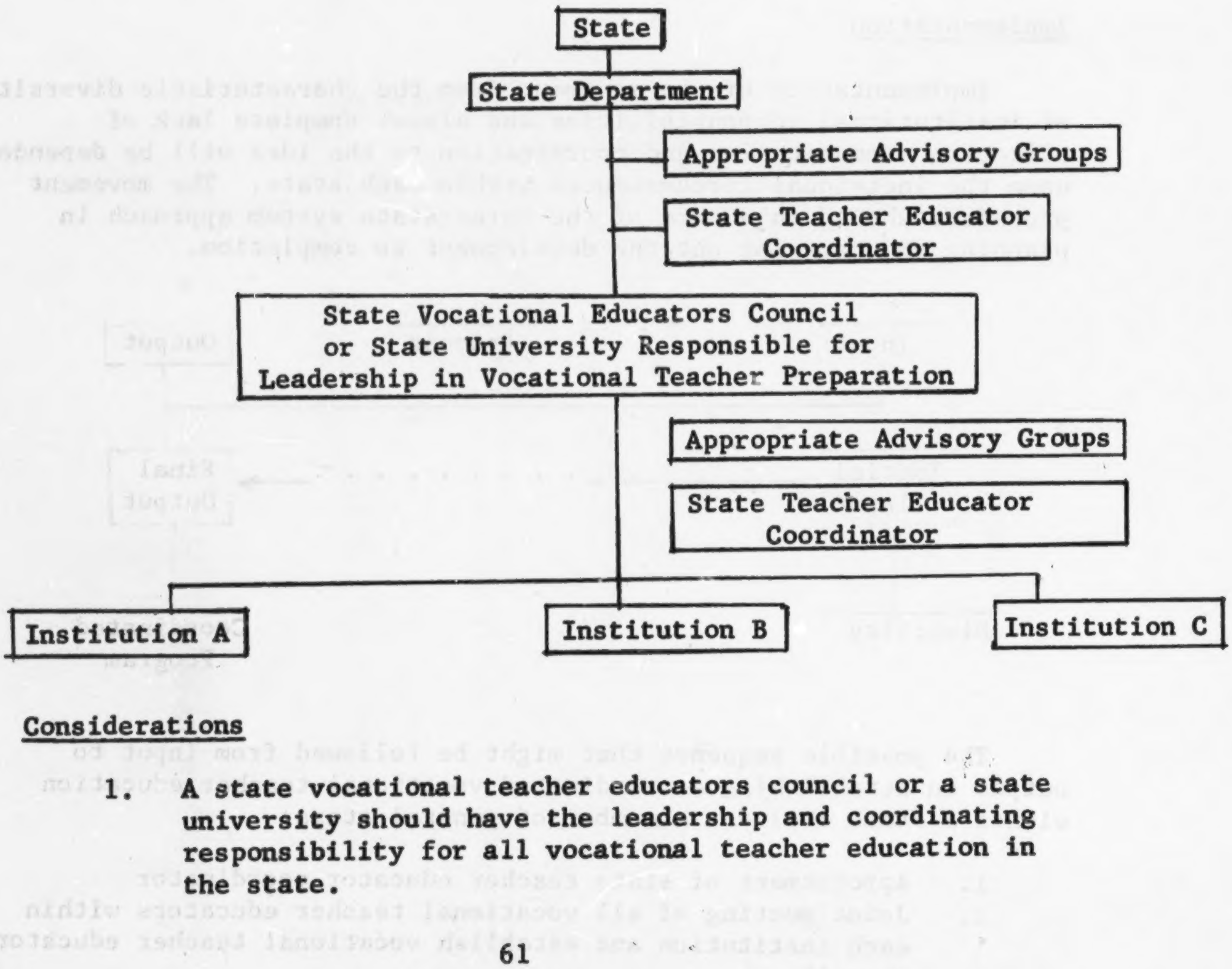
The following commonalities (competencies) are required in the program of each of the service areas in the preparation of effective vocational teachers. It is important and essential that these commonalities (competencies) be planned for and taught using the expertise of each service area teacher educator.

1. Human and public relations
2. Philosophy, principles and history of vocational education
3. Methods (basic, introduction)
4. Evaluation techniques and procedures
5. Instructional media
6. Initiation and use of advisory committees
7. Educational and industrial/business relations
8. Coordination and cooperative procedures
9. Administration and supervision
10. Placement and follow-up
11. Planning for and meeting needs of special groups
12. Pertinent legislation/implications
13. Availability and use of community resources
14. Principles of learning
15. Teaching techniques
16. Selection of subject matter
17. Curriculum and course development
18. Occupational guidance/procedures
19. Shop/laboratory, and classroom management
20. Research

Some implementation vehicles that might be used for initiating and presenting the above are the following:

1. Formal classes
2. Internship
3. Field experiences
4. Programmed instruction
5. Simulation
6. Individualized -- one-to-one
7. Independent study
8. Small and large groups
9. Seminars
10. Team teaching
11. Multi-disciplinary
12. Case studies
13. Encounters
14. Video tapes
15. Learning laboratory

INTRA-STATE ORGANIZATION


State
State Department
Appropriate Advisory Groups
State Teacher Educator Coordinator
State Vocational Educators Council or State University Responsible for Leadership in Vocational Teacher Preparation
Appropriate Advisory Groups
State Teacher Educator Coordinator
Institution A
Institution B
Institution C

Considerations

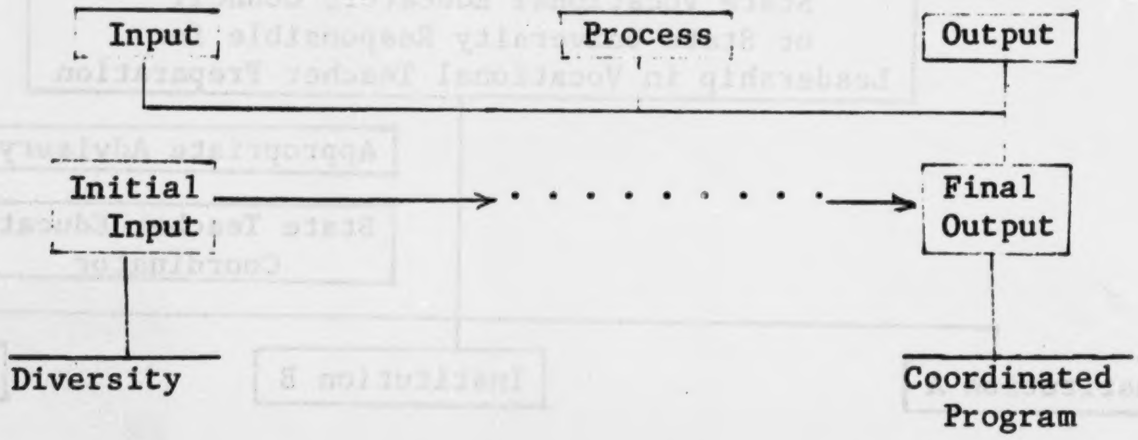
1. A state vocational teacher educators council or a state university should have the leadership and coordinating responsibility for all vocational teacher education in the state.

   a. A state vocational teacher educators council should include representation from each of the teacher education institutions and the teacher educator coordinator.
   b. A state university should be one offering a program of vocational teachers preparation.

2. State department support to include appointment of a state teacher educator coordinator and appropriate advisory groups.
3. Existing institutions should be used where possible, who have or are moving toward the ideal institutional organization.
4. Cooperation and communication must be maintained between agencies and institutions for effective teacher preparation.
5. Specific service area teacher preparation should be retained in institutions with strong service area orientation and programs.
6. Wasteful duplication of programs should be avoided.
7. Additional instructional centers should be established only upon demonstrated needs.

Implementation

Implementation of the movement from the characteristic diversity of institutional responsibilities and almost complete lack of effective communication and coordination to the idea will be dependent upon the individual circumstances within each state. The movement procedure should make sure of the three-state system approach in planning and carrying out the development to completion.



The possible sequence that might be followed from input to output in establishing a coordinated vocational teacher education within a state includes a number of general steps:

1. Appointment of state teacher educator coordinator
2. Joint meeting of all vocational teacher educators within each institution and establish vocational teacher educator council.

3. Joint meeting of all vocational teacher educators of all state institutions offering a teacher education program.

    a. Establish a state vocational teacher educator council to include representation from each institution offering a vocational teacher program.

4. Involvement of others -- individuals and groups (advisory, certification, etc.)
5. Establish leadership agency.
6. Final coordinated state vocational teacher education program.

Problems for Future Study

1. Communication and Cooperation

    a. Regional In-Service Teacher Education
        (1) In-service education offered by need not restricted by geographical boundaries.
        (2) Possibly waive non-resident tuition between states for vocational in-service classes.
        (3) Eliminate encumbrances on credit transfers.
        (4) Facilitate changes in credit hour differences Clock hour requirements.
        (5) Utilize regional educational laboratories.
        (6) Encourage interstate commissions on higher education to assist in facilitating reciprocity.
        (7) Present ideas to other organizations and commissions to investigate crosslined in-service training (cooperating industries, etc.).

    b. Research in various regions on in-service teacher education is necessary to:
        (1) Make use of experts
        (2) Provide additional opportunities for teachers.
        (3) Make programs more uniform.

2. Cross service cooperation is a responsibility of professional organizations to communicate and cooperate with all other service areas.
3. We as individual participants must disseminate, encourage, facilitate, and cooperate with state and local groups to spread the results of this seminar.

PLAN OF OVERALL ACTIVITY FOR VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT AGENCIES

Group 4

Participants

Gerald K. LaBorde, Chairman
Duane Ewer
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Vanetta Lewis
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Nell Logan
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Mildred Matthews
Robert McCardle
Art Morgan

Introduction

The model outlined and demonstrated here-in is a suggested plan of overall activity for the vocational education personnel development agencies. It considers the competencies required of a professional educator for a particular position within the educational field. It is the intent of the plan that the persons entering the field of vocational education will receive an assessment of their experience and credit toward a degree will be given where successful experience in the competencies required is discovered. A prescription for formal education will be written for the individual to provide the additional competencies required to meet basic standards and for continued up-dating and maintenance of standards.

The plan assumes recruitment of teachers from many sources. After determination of the need for further education, the total resources of the educational system and industry will be brought to bear upon the development of the additional compentencies the individual requires to meet the standards established by the University, State Department, industry, etc.

Constant evaluation of the program of offerings in the educational system and their relevance to the needs of students will be maintained. This will assure continued up-dating of the program and the steady progress of the student toward his goals.

The model can be applied to the whole system of teacher training or any individual part or level.

The plan is meeting its goals when each person who presents himself and expresses the desire to be a professional vocational educator can be received into the program; given credit for relevant experiences; offered a program of educational activities by which he can gain the additional competencies required for his professional role.

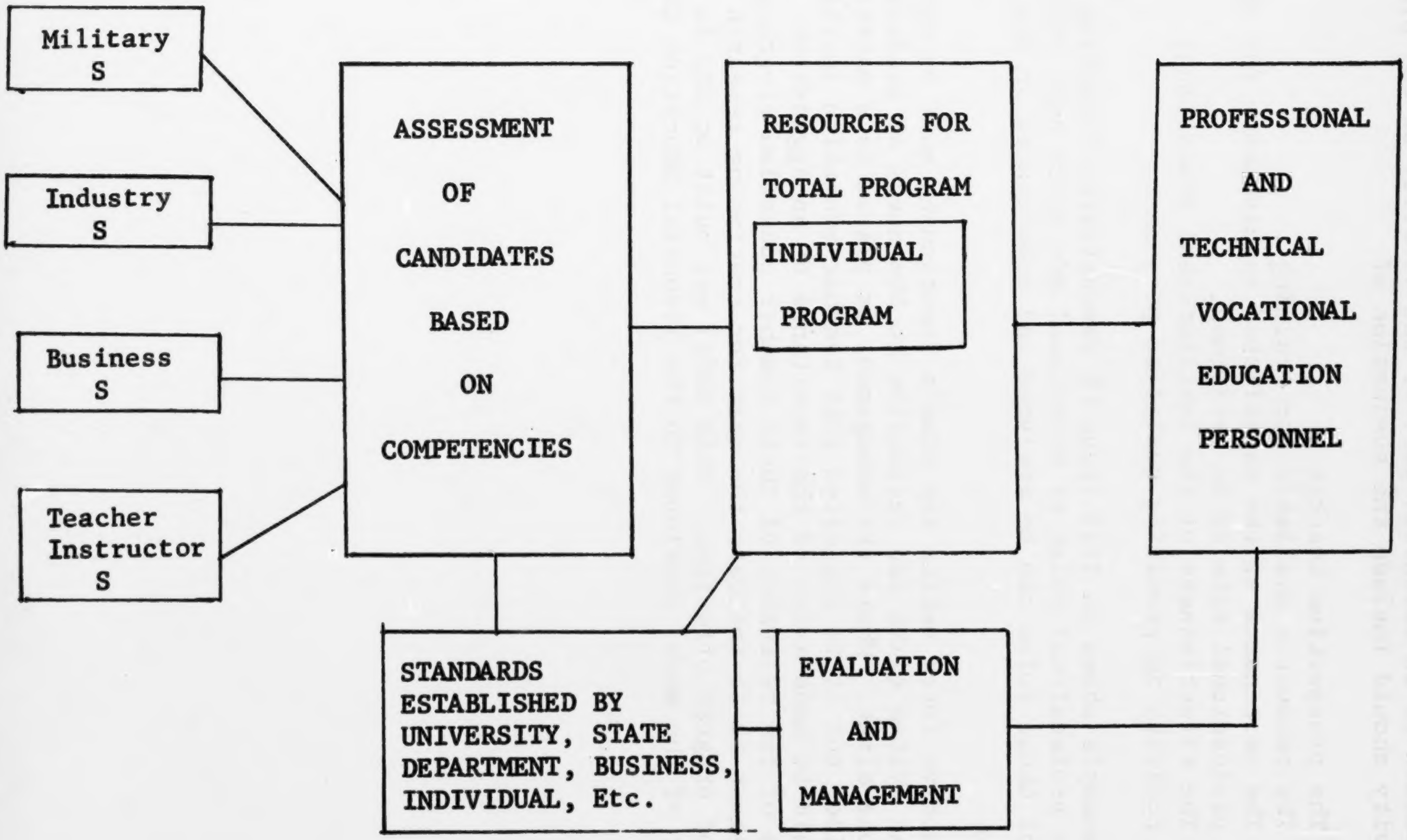
Evaluation is an essential part of the vitality of the plan. This activity should include the evaluation of:

1. The prospective teacher
2. The resources available for training
3. The pertenance of the established requirements for the professional role to be performed.
4. The effectiveness of the institutional educational activity in providing qualified personnel.

The example shown in IIIB (page 71) demonstrates "teaching." Any of the professional roles of vocational educators and, perhaps, elements of those roles can be analyzed and substituted in the model.

The motive force behind the plan's functioning must be dynamic to keep the system alive and responsive to the needs of students and institutions alike. Where the management is placed is a matter of local choice, but it is suggested that teacher education institutions should be made aware of the importance of an aggressive evaluation of the relevance of their teacher education programs. This statement is to indicate the need for continuing research and revision of program offerings. This model was built on and is a refinement of the model developed in the Technical Education Group.

MODEL FOR THE PREPARATION OF VOCATIONAL AND TECHNICAL EDUCATIONAL PERSONNEL


Military S
Industry S
Business S
Teacher Instructor S
ASSESSMENT OF CANDIDATES BASED ON COMPETENCIES
RESOURCES FOR TOTAL PROGRAM
INDIVIDUAL PROGRAM
PROFESSIONAL AND TECHNICAL VOCATIONAL EDUCATION PERSONNEL
STANDARDS ESTABLISHED BY UNIVERSITY, STATE DEPARTMENT, BUSINESS, INDIVIDUAL, Etc.
EVALUATION AND MANAGEMENT

I. FRAMEWORK FOR THE PROGRAM MODEL

A. The program retains the appropriate elements from those presently in existance.

B. Relevancy is of prime importance in any program of teacher education.

C. A core of knowledges rather than a core of courses in needed.

D. "Societal" conditions affect preparation of teachers in a variety of ways.

E. Any plan for teacher education programs has built-in flexibility.

F. Competency is of primary consideration.

G. Certification is dependent upon competence.

H. Long range programs aim toward a first degree and continuing study.

I. In-service education provides for up-dating.

J. Teacher education is a joint effort between education and business and industry, professional organizations.

K. The teacher preparation program is individualized to allow for strengths and weaknesses.

L. The teacher education program prepares for advancement.

M. Evaluation is continuous at all levels of the educational process.

N. Funding of technical teacher education will be provided by combinations of federal, state and local sources. Funds from other sources will be available for special projects.

O. Technical expertise is obtained from a wide variety of experiences and should be accepted and credited as part of the educational process.

II. VITAL TECHNICAL TEACHER COMPETENCIES

A. Competency is a prime consideration. It consists of three parts:

1. Technical

2. Teaching

3. Personal-Social

B. Evaluation of competencies:

1. Technical competencies

    a. Technical knowledge tests
    b. Technical skill tests
    c. Past performance
    d. Other

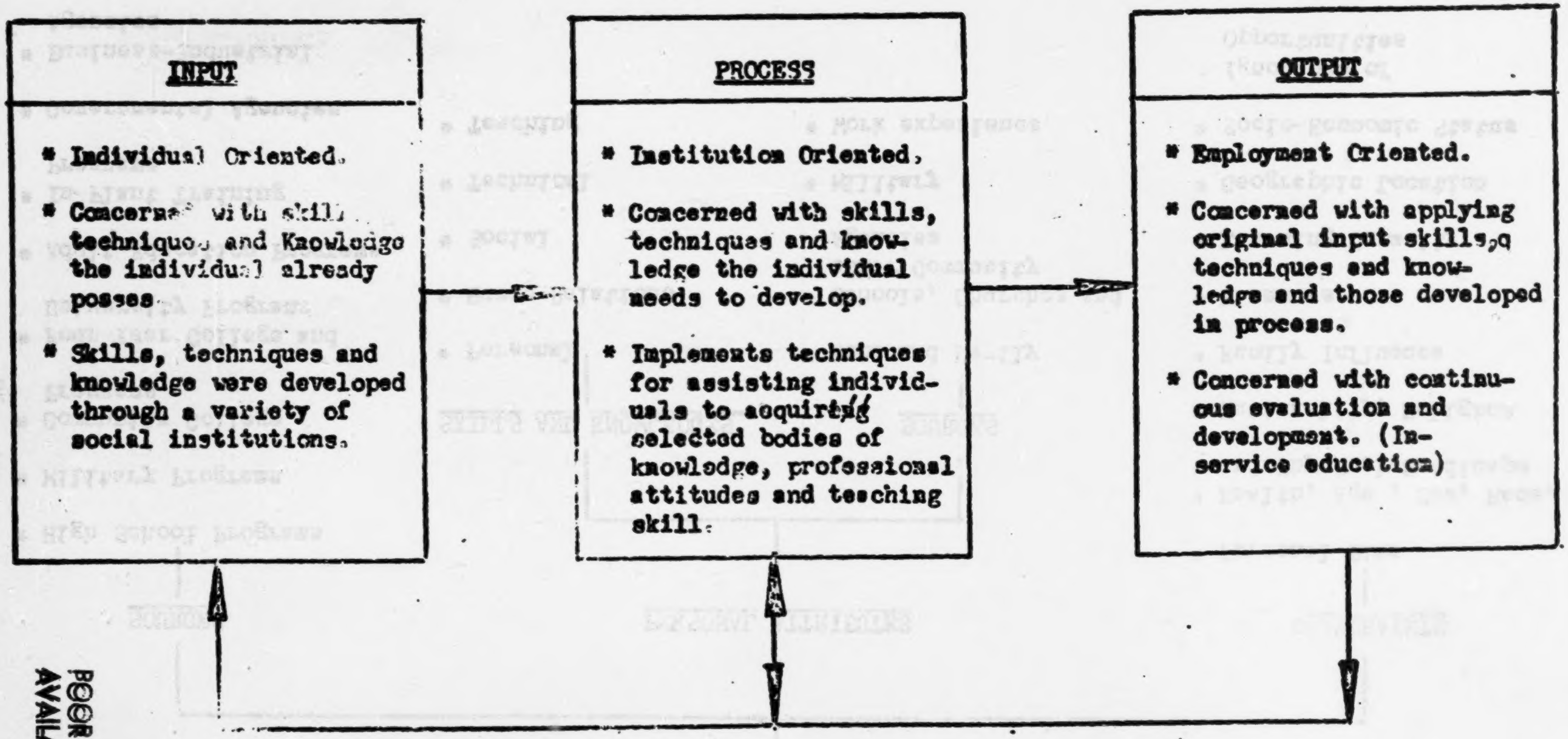
2. Teaching competencies

    a. Internship
    b. Micro-teaching
    c. Observation
    d. Interview
    e. Recommendations
    f. Other

3. Personal-Social competencies

    a. Standard tests
    b. Recommendations
    c. Accumulated records
    d. Interpersonal relations
    e. Other

III. THE PROGRAM MODEL



INPUT

- Individual Oriented.
- Concerned with skills, techniques and knowledge the individual already posses
- Skills, techniques and knowledge were developed through a variety of social institutions.

PROCESS

- Institution Oriented,
- Concerned with skills, techniques and knowledge the individual needs to develop.
- Implements techniques for assisting individuals to acquiring selected bodies of knowledge, professional attitudes and teaching skill.

OUTPUT

- Employment Oriented.
- Concerned with applying original input skills, techniques and knowledge and those developed in process.
- Concerned with continuous evaluation and development. (In-service education)

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IIIA. INPUT - INDIVIDUAL ORIENTED

SOURCES

- High School Programs
- Military Programs
- Community College Programs
- Four-Year College and University Programs
- Adult Education Programs
- In-Plant Training Programs
- Governmental Agencies
- Business-Industrial Agencies
- Retirees - Professional and Military
- Hobbyists
- Dropouts

PERSONAL ATTRIBUTES

SKILLS AND KNOWLEDGES

- Personal
- Human Relations
- Social
- Technical
- Teaching

SOURCES

- Home and Family
- Schools, Churches and other Community Agencies
- Military
- Work experience

CONSTRAINTS

- Personal Bias
- Health, Age , Sex, Race, and Physical Handicaps
- Nationality, Religion
- Family Influence
- Finances
- Learning Capacity
- Geographic Location
- Socio-Economic Status
- Ignorance of Opportunities
- Counseling
- Societal Influence
- Work Experiences
- Military Influences

IIIB. PROCESS - INSTITUTION ORIENTED

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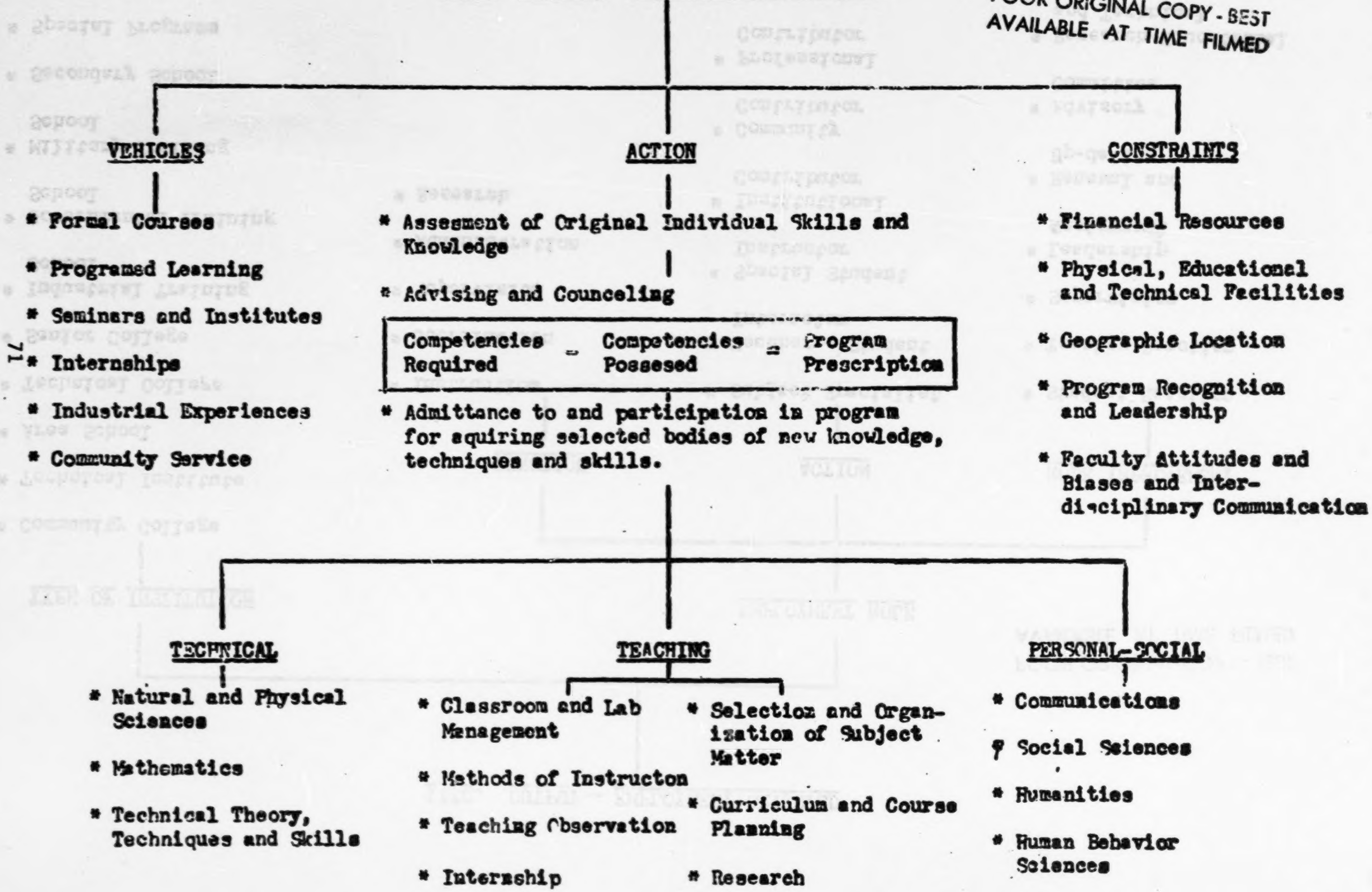

VEHICLES

- * Formal Courses
- * Programed Learning
- * Seminars and Institutes
- * Internships
- * Industrial Experiences
- * Community Service

ACTION

- * Assesment of Original Individual Skills and Knowledge
- * Advising and Counceling

Competencies Required - Competencies Possesed = Program Prescription

- * Admittance to and participation in program for aquiring selected bodies of new knowledge, techniques and skills.

CONSTRAINTS

- * Financial Resources
- * Physical, Educational and Technical Facilities
- * Geographic Location
- * Program Recognition and Leadership
- * Faculty Attitudes and Biases and Interdisciplinary Communication

TECHNICAL

- * Natural and Physical Sciences
- * Mathematics
- * Technical Theory, Techniques and Skills

TEACHING

- * Classroom and Lab Management
- * Methods of Instructon
- * Teaching Observation
- * Internship
- * Selection and Organization of Subject Matter
- * Curriculum and Course Planning
- * Research

PERSONAL-SOCIAL

- * Communications
- * Social Sciences
- * Humanities
- * Human Behavior Sciences

IIIC. OUTPUT - EMPLOYMENT ORIENTED

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TYPE OF INSTITUTION

* Community College
* Technical Institute
* Area School
* Technical College
* Senior College
* Industrial Training School
* Governmental Training School
* Military Training School
* Secondary School
* Special Programs
* Special Groups

EMPLOYMENT ROLE

FUNCTION

* Instruction
* Coordination
* Supervision
* Administration
* Research

ACTION

* Subject Specialist
* Teacher - Student Interactor
* Special Student Instructor
* Institutional Contributor
* Community Contributor
* Professional Contributor

ROLE IMPROVEMENT

* Student Reaction
* Teacher Reaction
* Supervision
* Leadership Assignment
* Renewal and Up-dating
* Advisory Committee
* Research-Educational and Technical

Geographic Group 4 having participants from Alaska, Montana, Oregon, Utah, South Dakota, Washington and Wyoming identified some of the problems of common concern in providing quality vocational education in states where sparse population and distance are factors.

1. Present legislation for vocational education, Rules and Regulations and the Guidelines for State Plans do not provide the framework for high quality vocational education in states of sparse population.

    a. Some of the problems may be resolved through cooperative efforts of various state teacher education institutions within the region in providing in-service education for teachers in the specialized areas of instruction.

    b. Regional research is needed that is directed to the needs of vocational education for Rural America to identify and develop alternative approaches to solving the common problems.

    c. Regional leadership is needed for coordination of teacher education, research, and program development for states with the unique problems arising from sparse population so quality vocational education may be provided for the youth and adults in these areas.

    d. The limited number of identifiable students with academic, socio-economic and other handicaps does not provide the student populations adequate to establish special classes to serve the needs of these students.

Group 4 would recommend that this Conference go on record as favoring the support for Regional or Special Vocational Education Conferences which would provide Vocational Teacher Educators serving sparsely populated areas an opportunity to work together and improve programs of vocational education in their areas.

DEVELOPING SOLUTIONS TO THE PROBLEM OF "COMMONALITY"

Group 5

Participants

James Eddy, Chairman	James Finical
Dolph Camp	John W. Glenn
Billy Jackson	Elaine Jorgenson
Earl Knebel	Ivan Lee
Bill Lovelace	Robert R. Price
Lucille C. Sampson	

Monday, August 18, 1969, p.m. Group became acquainted with each other and also with the outcomes each desired. They agreed that attention should be focused upon areas and means of cooperation in teacher education between services that would result in strengthening all programs and benefit each service.

After some discussion of the differences in specific detail between each service and between states, the group proposed the following areas of pre-service teacher education that they thought should be explored by all states in developing solutions to the problem of "commonality."

1. Use of instructional media.
2. Instructional processes or methodology.
3. Methods and techniques for teaching the social-economic disadvantaged and handicapped groups.
4. Organization and supervision of adult vocational education.
5. Vocational guidance and counseling in programs of career orientation.
6. History of vocational education.
7. Philosophy of vocational education.
8. Administration and supervision of vocational education.
9. Principles of curriculum development.
10. Cooperative training programs in vocational education.

It was agreed that these areas represented only a partial listing but represented major areas for immediate study.

Tuesday, August 19, 1969. The group decided to analyze and list those "unique" areas of each service that would not readily lend themselves to cooperation between services. After two hours of challenging discussion it was finally decided that the only areas of "uniqueness" that would inhibit cooperation between services were in special areas of specific application of content. (Chairman's Note: This discussion certainly broke down many "psuedo" barriers and suppositions).

Wednesday, August 20, 1969. The group decided to explore ways and means of implementing cooperation in vocational teacher preparation between the services. As a general thesis the following statements were developed as representing their thinking:

1. Effectiveness of vocational teacher preparation will be in direct relationship to the degree of cooperation between services.
2. A maximum amount of cooperation must exist between the state department of vocational education and the teacher education institutions in planning the state programs of supervision and teacher education.
3. Mutual agreements must be reached between the state department of vocational education and the teacher education institutions that will insure the availability of adequate funds to do the job.

It was decided that there were two distinct levels of cooperation--cooperation within a single institution and cooperation between two or more institutions. Each level had distinct or specific problems in developing cooperation between services.

As a general recommendation, the group agreed that: "An office of vocational teacher education should be established in each state department of vocational education and charged with the responsibility of coordinating all programs of vocational teacher education." A centralized office of this type would be invaluable in developing plans of cooperation between services within an institution and between institutions. It also would facilitate cooperation between institutions and the state department of vocational education.

The group developed possible plans for implementing programs of cooperation between vocational teacher education in the various services. The establishment of "face to face" communication on an institutional level would be necessary in approaching the problem. The idea most often expressed was "talk it out" until presumed conflicts were resolved. From this initial approach areas of common interest could be developed through proper dialogue.

In the development of plans for working together in the preparation of vocational teachers it was felt that "team teaching" would be an important factor in enriching the program. This might mean joint appointments, not only between the services but as an inter-disciplinary basis too. Social and political science and economic personnel were most frequently mentioned as needed to enrich the program of vocational teacher education.

It was recommended that careful consideration be given to the establishment of a state committee on Vocational Teacher Education. It was felt that plans for this committee should be developed jointly by the State Department of Vocational Education and the vocational teacher education institutions. Appointment of committee members probably should be the responsibility of the State Director of Vocational Education. The committee would make recommendations concerning vocational teacher education to the State Director of Vocational Education and the office of teacher education coordination and to the teacher education institutions. The groups suggested that the following categories be considered in appointment to such a committee:

School Administrators
State Certification Officer
Labor
Business and Industry
School Board Members
Junior College Administrators

Recommendations for improvement of vocational teacher education, from such a committee as described here, would carry considerably more weight with academic deans and college administrators than if they came only from the State Department of Vocational Education.

Up to this point all the discussion had centered around the "pre-service" program of vocational teacher education and the group began to analyze the program of "in-service" teacher education for areas of cooperation. It was pointed out that in the rapidly changing social and economic conditions of today a strong program of in-service teacher education was in greater need than ever before by all services. Except for programs for updating occupational competence, all in-service programs of real need to vocational teachers were listed as:

Developing Programs of "Socio-Political Action"
New Uses of Various Instructional Media
Principles and Practices in Developing a Program of
  Cooperative Education
Development of a Philosophy of Vocational Education
Methods and Techniques of Teaching Special Groups--
  Disadvantaged and Handicapped
Leadership Development
Developing a Program of Career Orientation

Thursday, August 21, 1969. Discussion centered around the problems of recruitment and selection of student teachers. In view of the increased emphasis placed upon vocational education and a corresponding rapid increase in demand for additional programs, there is a danger that teacher quality might suffer from poor selection. For these reasons it is essential that each state should establish a continuous and systematic program of teacher recruitment and selection so as to assist in insuring that the quality of vocational instructors will be maintained at a high level.

Summary

The group recommends:

1. A continuous program of teacher education research be conducted to assist in evaluating and improving vocational teacher education programs.
2. Resumes of research studies pertinent to vocational teachers, should be interpreted and presented to them at periodic state meetings.
3. There should be an office of coordination of teacher education established within the State Department of Vocational Education.
4. In the interest of efficiency and effectiveness a maximum amount of cooperation between services must exist in vocational teacher preparation.
5. A maximum amount of cooperation should exist between the State Department of Vocational Education and vocational teacher education institutions in planning programs of supervision and teacher education.
6. Mutual agreements be developed between State Departments of Vocational Education and vocational teacher education institutions so as to insure the availability of adequate funds necessary to carry out the program of vocational education.
7. There should exist a very close cooperative working relationship between the teacher training and state supervisory staffs.
8. Students should be involved in the evaluation of all teacher education courses.
9. Team teaching, involving teacher educators from different services and from other academic disciplines should be used to increase the effectiveness of the teacher education program.
10. A state committee on vocational teacher education should be established to assist in developing a more effective program of teacher education.
11. A long range plan for the professional development of vocational teacher educators and state supervisors should be established.
12. Conferences such as this should be conducted on the state or regional level in the immediate future.
13. A very close working relationship should be maintained between guidance counselors, administrators, teachers and teacher educators.

14. **A program of career planning should be planned by guidance counselors and teacher educators.**
15. **Experimental programs of vocational teacher education, involving a maximum of cooperation between services, should be established.**

SEMINAR EVALUATION

The evaluation of group activities and affect on future behavior is most often achieved through a rating scale instrument. There are numerous weaknesses in this approach to evaluating, however, a fairly high degree of reliability can be expected when the results are grouped and discussed by areas. The method chosen to evaluate the National Seminar on Vocational Teacher Education was a rating form administered to the participants at the completion of their seminar experience followed by a similar rating form administered eleven months after the Seminar.

The responses to the two instruments will be grouped and discussed in the following areas: Objectives and Purposes of the Seminar; Seminar Program and Content; Immediate and Post Affect of Program; and Recommendations. A numerical tabulation of responses on sample forms of the instruments are included in the Appendix.

Objectives and Purposes of the Seminar

The over-all objectives and purposes of the National Seminar on Vocational Teacher Education appeared to have been understood by a majority of the participants at the conclusion of the Seminar (75 per cent of respondents) and 77 per cent of the respondents on the post instrument.

Eighteen participants indicated a discrepancy in the objectives of the Seminar meeting their personal objectives (Item 5 Post). This was reflected in their following responses to Item 6 (I didn't learn anything new); Item 8 (I could have learned as much from a book); and Item 28 (The content presented was not applicable to my work).

It appears the participants aware of the purposes and objectives of the Seminar prior to arrival were more open to the proceedings while the participants expressing some disagreement in their understanding of the objectives failed to receive maximum benefit from their experience.

This would appear to indicate a need for planning committees of future seminars and institutes to clarify objectives and purposes of meetings well in advance of participant selection. Participants could be invited with full knowledge of the objectives of the meeting and their intent to accept the responsibility of their attentance.

Participants and Resource Personnel

Very few of the participants thought the speakers were unqualified or failed to be knowledgable in their area of specialty. The pre and post instruments indicated over 95 per cent of the respondents profitted from the speakers at the Seminar.

In response to Item 14, dealing with the maintaining of new acquaintances, only one participant was undecided at the close of the Seminar. Three respondents were undecided after one year and four indicated an apparent lack of opportunity to maintain acquaintances. Other respondents to the instruments indicated an intent and effort to maintain acquaintances made during the Seminar.

Most individuals participating in seminars, institutes, and conventions indicate the most valuable aspect of their participation to be the formation of new professional friendships, the renewal of past acquaintances, and perhaps most important, the interchange of ideas in the formal and informal settings. These are the intangible benefits of group participation that are difficult to assess through traditional evaluation techniques.

Seminar Program and Content

The participants appeared to feel favorably toward the content and professional level of the material presented at the Seminar (Items 7 and 10). Most respondents believed the material to be stimulating and the Seminar experience provided for program guidelines in returning to their respective institutions.

Apparently most participants felt accepted in their group assignments, and that the group activities were worthwhile. Several comments indicated the value of small group participation in sharing ideas and new approaches to resolving problem areas.

Immediate and Post Affect of Program

The initial instrument appeared to indicate favorable and enthusiastic response to the Seminar. The participants indicated the acquisition of guidelines for future action and a general feeling of satisfaction from the Seminar experience.

The follow-up instrument indicated the continued presence of guidelines with some apparent frustration in fulfilling expectations. Several participants have had an opportunity to utilize the information and ideas in bringing about change in their programs. Most participants have shared the Seminar information and ideas with their staff members. Program changes have been initiated by almost 50 per cent of the respondents as a result of the Seminar experience (Item 32 Post).

Item 21 (Post Instrument) indicates an apparent need to bring about a closer working relationship between state staff and teacher training institutions.

As a result of the Seminar experience, the participants, generally, felt an increased awareness of the objectives of the other services, the commonality of problems of the various service areas, and the need for more cooperation between the service areas.

The Post Evaluation Instrument indicated a continued enthusiasm on the part of the respondents, but appeared to show some frustration in achieving the goals and ideas generated through the Seminar experience. Several comments were directed to the need to include state staff personnel and institutional department heads who are in the position to bring about change.

Recommendations

The participants generally responded favorably to the Seminar at the conclusion of the experience and also after a period of one year.

Many respondents expressed a need for a follow-up Seminar with the same participants. This frustration experienced by some in attempting to bring about program change was apparent in several comments. Eight respondents suggested a follow-up Seminar to explore and provide the means of bringing about program change.

Most participants believed the Seminar contributed much to the field of Vocational-Technical Teacher Education.

The Post Evaluation Instrument yielded few negative comments about the Seminar. The time interval of one year in securing follow-up information was considered too long by several respondents.

The favorable comments indicated a well planned and executed Seminar.

GENERAL COMMENTS:

A. Suggestions for Improvement:

1. A better orientation about the seminar sent to participants well in advance.
2. More specific directions as to purposes or goals of institute.
3. All participants did not receive complete data for seminar.
4. Notification of such a meeting or seminar should be given farther in advance. (6)
5. Would like objectives in advance.
6. Homework assigned before arriving at seminar.
7. Presentation of position papers prior to seminar opening with presenter present for reaction sessions.
8. An introduction the first day by someone involved in the original organizing of the seminar might have cleared up differences of understanding.
9. Too long -- shorten seminar from two weeks to one week. (12)
10. Concentrated plan of one week without side trips would have more appeal.
11. Utilize Monday -- shorten workshop.
12. Could have been a shorter seminar -- some of the final group sessions seemed to be forcing themselves to find discussion topics though they did not tie directly into the objectives of a model development.
13. Two weeks may be too long -- and weekend should be arranged for optional formal meetings.
14. A full two weeks may not be fully efficient for all participants. There may be some merit in involving task force committees for a week on a particular assignment and follow the next week with another group to follow through on the activities of the previous task group.
15. Tuesday, August 19th, schedule too long.
16. Give nationally recognized persons more program time. (Example: Dr. Rupert Evans.)
17. Eliminate programs not appropriate for this type of seminar. (Example: Encounter tapes.)
18. Sensitivity training was useless -- waste of time.

19. Speakers should be highly screened.

20. More interaction with the resource consultants.

21. Keep the service areas together for a longer length of time.

22. Need to include specialists outside of vocational education and also business and industrial personnel for a more comprehensive view -- heavier emphasis on business and industry especially when determining training programs.

23. Groups more structured. (6)

24. For ease of compiling and summarizing data, more structure needed so groups work even more toward one report.

25. Let us examine more in detail selected programs structured for total vocational education. Perhaps examples of different kinds of administrative structure would be beneficial.

26. At a time when motivation is strong, group involvement should be carried on.

27. Work for all of education and educators to accept each area whether it is T&I or general education.

28. Work with group leaders prior to beginning of seminar.

29. Have all group leaders selected on their qualification as group leaders. (The group I was in was not a discussion group -- the leader applied no conference leadership techniques.)

30. I felt that the true leaders of my service area were lacking and as a result the output will not be up to the standard to which that service area deserves.

31. Some group leaders gave of their own opinion too much.

32. More meetings of this type should be conducted.

33. Seminars such as this should be held annually in order to improve vocational education in the future.

34. Better planning on field trips -- more time on field trips to visit with trainees and teachers.

35. Better services for duplication of materials.

36. More published resource materials should be available. (2)

37. More time should be set aside for hearing and discussing reports prior to adjournment.

38. Would like to have been exposed to "models" of teacher education "integrated" organization.

39. Need more mixed groups. (2)

40. A warm-up session would have been helpful on the first evening.

41. Restructuring of free time -- introduction on first day. (2)

42. Source personnel should be more relevant to current problems in vocational teacher education.

43. Speakers to be rearranged to be more relevant to areas of discussion.

44. More work in the area of methodologies.

45. Would not object to small group work at night.

46. Have some evening work sessions planned.

47. A secretarial staff from the local area to serve with each service group to handle all recording, typing and copying.

48. Push for immediate dissemination of final report to all participants.

49. Geographic orientation to campus and nearby facilities; to Knoxville & area.

50. Directory of churches and services. (2)

51. With reference to geographic meetings: Do not just draw a line to separate states -- discover which other states our state associates itself with.

52. Common expectations from each group (service and geographic) would have been helpful -- for reporting purposes if no other.

53. Involve supervisory and administrative personnel.

54. State directors and persons responsible for certification should be present as well as deans so that changes needed can be accomplished.

55. Include administrators (college) who would be in a better position to help implement ideas agreed upon during meetings of this nature.

56. Consider course credit for added incentive.

57. Largely a repeat with and for others not in attendance here.

58. Better group communication within conference.

59. Eliminate extra-curriculur activities.

60. Weekends should have planned activities. (2)

61. Plan to aim at fewer goals.

62. Enter into group activities the first day.

63. "I came here not knowing what to expect and at the last of the first week I had not been enlightened."

B. Problem areas needing further study:

1. Commonalities should be stressed because each service area seems to think that what it has is common to all others, but what the other service areas have is not common to it. Each service area needs a better understanding of other service areas. (2)
2. The charge for accompanying spouse seemed a bit high.
3. Communications. (4)
4. Leadership development.
5. Offer for credit of two weeks.
6. More predominately Black colleges should be involved.
7. Invitations to such seminars should go to the colleges rather than to State Directors of Vocational Services.
8. System analysis.
9. Workshop on operational implementation of developed guidelines.
10. Problems of a sparsely populated area need a different approach than others. Even the sparsely populated states have their disadvantaged people and their problems are different from the disadvantaged people of other cities. Even the sparsely populated states have their ghetto areas crying for help -- not much help is forthcoming.
11. States with common problems -- sparse population and distance.
12. A look into problems of rural community vocational education. The intensive ghetto emphasis has a touch of our earlier Sputnik-inspired effort. We must not forget the total picture of needs.
13. Encouragement from National Office with financial aid to set up like seminars at regional and state levels.
14. Air-conditioning in food service.
15. New techniques and philosophy.
16. The development of a unified national philosophy of vocational education involving each of the service areas and related academic discipline, as a working part of that development.

17. Further coordination and unification of all vocational services.

18. How about a curriculum development committee made up of a cross section of the services to write courses of study with the core concept. This could be of a longitudinal nature and would ultimately be applicable to teacher education in occupational education.

19. Communication and cooperation within and between different areas of vocational teacher education -- college of occupational education status on university level -- public relations -- teacher education for disadvantaged, vocational rehabilitation, special groups.

20. A need for all of the vocational education areas to be closer together. I feel each of the areas are not working together as a total vocational program. This I believe could be accomplished by more areas of vocational education programs having a seminar in each state and also by all states getting together as this one.

21. How to promote cooperative working relationships between different divisions of vocational education and total education program.

22. Keep up with this type of seminar -- with both geographic and discipline mix.

23. More cooperation between groups.

24. In a few cases the timing of events was faulty; however, I doubt that it could be improved without extreme regimentation which would be much worse.

25. The sensitivity presentation and follow up didn't fit.

26. More emphasis on the ideal model of teacher education.

27. Evolving program of vocational teacher education models.

28. Teacher education models written in behavioral objective terms for computer print outs.

29. More study on economic results of teacher education.

30. Support or non-support of industrial arts programs and their value to vocational education. Special education's involvement with vocational education or vice versa.

31. How to prepare teachers in our field to work with persons with special needs.

32. Development of specific programs for preparing vocational teacher educators.

33. Amount of college credit to be granted for occupational experience in all fields as well as T&I.

34. Vocational guidance as related to vocational and technical education. Perhaps we need a seminar on this subject, with participants largely vocational education teachers but with some able vocational guidance workers to contribute.

35. Guidance personnel need to be involved in vocational teacher education philosophy to a greater extent. Maybe an individual in guidance who was strong vocationally would have helped to bring along others in guidance if he were on the program.

36. Establishing a center or foundation to continue this type of program and for disseminating information and serving as a clearing house.

37. The setting up of an office or other facility (preferably on a campus rather than in Washington) supported by Federal or foundation funding, to serve as a means for communicating among vocational teacher educators about successful programs aimed at the disadvantaged and handicapped groups. This agency could study, collect, and disseminate materials, etc. that would help us meet the needs of these groups.

38. Have wider distribution of research and other materials in a usable form to many groups.

39. Continue emphasis on unifying the professional vocational-technical education program.

40. Unity of teacher education programs in vocational education.

41. Business education personnel need a stronger and more realistic philosophy of what good vocational education really is.

42. Problem of genuine purpose and goals of vocational education -- many have the idea that vocational education is not for preparing people to enter and advance in the labor force.

43. Objectives need more clarity both overall and small group. Too much depended upon group leader and his method of approach. Needed general goals from which to start.

44. Unity and strategies of vocational education.

45. Development of vocational education leadership at all levels (local, state and national).

46. Definition of priorities in vocational education (and other education).

47. Funding of vocational education problem at all levels.

48. Teacher education programs for vocational-technical administrators.

49. Teacher education programs for preparation of teachers to be serving as multi-service instructors; i.e., the vo-ag teacher in a small rural school who functions as the only vocational teacher.

50. Differentiated staffing.

51. Closer work and cooperation between teacher training institutions and state departments of education.

52. Content of professional courses need considerably more emphasis.

C. Appreciation:

1. The side trips (entertainment) were excellent.

2. The general hospitality -- food, concern for our welfare, etc. were excellent. (2)

3. The accommodations, meals and hospitality were far superior to my expectations of a seminar. The staff involved directly with the seminar and those engaged in food service and Morrill Hall were exceptional.

4. Good job -- well done.

5. An excellent meeting.

6. This seminar showed every evidence of being well planned.

7. Everyone in charge made every effort to make everyone feel at home, and secured any needed information.

8. This was one of the most significant conferences I have attended in my professional career.

9. I am glad you included me in this meaningful professional experience.

10. This was my first experience with a national seminar. I was very honored to have been a part of the group and though in my own mind I realize the difficulty of achieving perfection in the process of conducting such a seminar, many do not and are quick to criticize. The best evaluation I can give the seminar is that I learned and experienced new methods and applications for teacher education and plan to implement some of these into my own program. Again, thank you from the bottom of my heart.

11. I liked very much the opportunity to share ideas with other "new" teacher-educators. Many times these seminars are limited to the "top," "well-known," "100-years'-experience" teacher-educators.

12. I'm satisfied with outcome of conference.

PARTICIPANT'S LETTERS OF CRITIQUE (EXTRACTS)

. . . You are to be commended for the method of structuring the conference.

. . . I enjoyed my participation in it . . .

. . . I felt that the groups got much from the conference that will be of value to them when they get home.

. . . Every member of my group said . . . they were going to get together with all the other teacher trainers and conduct exploratory conferences along the lines that we held at Knoxville.

. . . really a pleasure to work with these fellows . . .

. . . I enjoyed having the heterogeneous group.

. . . it was worthwhile for us to be able to talk with our colleagues . . .

. . . to exchange ideas.

. . . hospitality extended to seminar participants went beyond any expectations we might have had.

. . . seminar . . . considerable meaning to our staff . . .

. . . seminar was worthwhile.

. . . much came to light that would merit a continuation of this type of conference.

. . . two extremely satisfying weeks . . .

. . . prove to be of considerable significance . . .

. . . came back to my campus with new ideas and enthusiasm.

. . . developed friendships that I value very much.

. . . participants were accommodated so well.

. . . I met many fine people.

. . . hope that there will be some continuation of this involvement.

. . . the experiences, contacts, and program were . . . very beneficial . . .

. . . professional activities provided . . . progressive educators . . . privilege to meet and work with . . .

. . . stimulating speeches, programs, panels, field trips, plays which we listened to and attended . . .

. . . delicious meals which were enjoyed . . .

. ... well made plans of the minute details . . .

. . . successful, pleasant, and profitable experience . . .

. . . ideas gained and shared . . .

. . . improved vocational education programs across the U.S.A. . .

. . . excellent program arranged . . .

. . . takes a heap of help and cooperation to conduct a seminar . . .

. . . excellent food was a key factor in promoting happiness among the group.

. . . opportunity to gather together, discuss and plan a realistic approach . . .

. . . time well spent

. . . some new directions and new types of programs will emerge.

. . . real "growth" experience. . .

. . . highlight in my educational experience . . .

. . . program excellent . . . provided many challenges . . .

. . . cultural experiences . . . as well.

. . . speakers excellent . . . group leaders effective.

. . . job well done . . .

. . . will bring long lasting results . . .

. . . one of the most significant conferences I have attended.

. . . confident many attitudes and prejudices were altered or broken down.

. . . as a result our department is taking a new direction on teacher education . . .

. . . most significant change . . . willingness, in fact desire, to talk more openly with other people in vocational teacher training about common problems . . . shared jointly.

. . . hope that this type of conference can be continued. Interesting to bring back some of the same participants in one or two years for a reassessment.

. . . "red carpet treatment" . . .

. . . total professional experience.

. . . challenging, inspiring, and rewarding.

. . . lasting memories . . . marvelous way in which so many different individuals with different interests worked so harmoniously . . .

. . . excellent program provided for the wives during the seminar.

. . . tremendous job of organizing and administering . . .

. . . directed inertia to some problems of vital concern . . .

. . . ideas and recommendations which were exchanged.

As a result of the Teacher Institute that I had the privilege of attending last summer, we made slight progress in Iowa to get vocational-technical teachers together. This past fall, after visiting with the personnel in charge of certification in the State Department of Public Instruction, they realized the necessity of doing something in the field of teacher education across all services. For the first time in the history of Iowa Vocational-Technical Education, all teacher educators were called to a special meeting in Des Moines to discuss mutual problems in Vocational-Technical teacher certification and education. Another meeting is supposed to be scheduled this spring to make further progress.

As a result of this Institute, I had the privilege of passing on the information gained to our Dean of the College of Education, the Director of Secondary Education, and the Chairman of Industrial Education. As a result of this meeting, we were able here at this campus for the first time to get together with the teacher educators for Agricultural Education, Home Economics, and Trade and Industrial Education, to communicate our mutual concerns in regard to the better preparation of vocational-technical teachers in the state of Iowa. Further meetings are scheduled for this spring to see what can be done across all three services.

APPENDIXES

APPENDIX A

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916
COLLEGE OF EDUCATION

DEPARTMENT OF
INDUSTRIAL EDUCATION

June 18, 1969

You have been recommended by your State Commissioner and/or your College Dean to participate in the National Seminar for Vocational Teacher Educators at the Knoxville Campus, University of Tennessee, August 11 through 22nd.

The Seminar, suggested by the National Seminar for College Deans last June 23-26, consisting of 100 selected vocational teacher educators, will attempt to:

1. consider some new aspects of teacher education,
2. examine some innovative models,
3. via the medium of small action groups to make some immediate and long range plans.

Arrangements have been made for all participants to reside in our brand new air-conditioned Justin Morrill Hall and partake of the presidential complex "red-carpet" meals (except Sunday, August 17th). These meals and lodging are financed through a grant from the U.S.O.E. at no cost to you. We are permitted an average travel allowance of $120.00 and anticipate meeting the required Air tourist travel cost for all participants. Your transportation costs, tax exempt Air tourist travel, or at $ .09 per mile official Rand McNally mileage which ever is less, upon presentation of travel voucher will be reimbursed by U-T through the grant funds. Please be prepared to present an airline ticket at the time you fill out the travel voucher.

Please, also return the enclosed note of your intention to participate in this Seminar. Unless we have your answer by June 27th, we will assume you are unable to attend and therefore will invite another person.

Sincerely,

Donald V. Brown
Director of Seminar

DVB:mh

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916
COLLEGE OF EDUCATION

DEPARTMENT OF
INDUSTRIAL EDUCATION

In accordance with our previous communication, you are expected as a participant in the National Seminar for Vocational Teacher Educators at the University of Tennessee, Knoxville Campus, August 11 to 22nd. There are undoubtedly a number of questions which you may have about the Seminar. We are trying to anticipate as many of these as possible, however, please feel free to telephone or write us, at your convenience.

1. Tax Exempt Air Tourist travel allowance or at $ .09 per mile official Ran McNally mileage which ever is less.

2. Meals and lodging at the air-conditioned Justin Morrill Hall are financed through the grant, at no cost to you.

3. We are pleased that some of you are bringing your spouse, and want you to be sure to understand that the additional cost to you for both their meals and lodging for the complete Seminar period, except Sunday, is $95.00.

4. Provisions are being made for at least a part time ladies program of activities during the Seminar. While it will not be possible to provide free transportation to these places, several interesting visits to local sights and industries are planned during the Seminar business sessions. We do hope that those who drive will share.

5. If you fly in, limousine service will take you (upon request) to Justin Morrill Hall on the U-T Campus.

6. If you drive be sure to take interstate I-40 or I-75 as you approach Knoxville and exit at 17th Street or US-129 to Kingston Pike. Please bring the enclosed maps to help you locate the new residence hall on Campus.

7. Linen and towels will be furnished even though the printed folder says no.

8. Meetings will begin formally at 8:30 A.M., Tuesday, August 12th.

9. Small group action committee materials and procedures will be helpful. May we suggest you take a look at:

(1)

(2)

TENTATIVE SCHEDULE

August 11	Monday	Fly-in, drive-in U-T, Knoxville
12	Tuesday 8:30 A.M.	Seminar Total Groups
13	Wednesday A.M. P.M. Evening	Teaching Models Total Groups Teacher Institute, Oak Ridge Atomic Museum, Picnic
14	Thursday	Small Groups Planning Ladies Activities
15	Friday	Small Groups Planning Ladies Activities
16	Saturday A.M.	Small Groups Planning Ladies Activities
17	Sunday	Free
18	Monday	Seminar Total Groups
19	Tuesday A.M. P.M. Evening	Small Groups Planning Smokey Mountain Job Corps. "Unto These Hills"
20	Wednesday	Small Groups Planning Ladies Activities
21	Thursday	Small Groups Planning Ladies Activities
22	Friday A.M. P.M.	Seminar Total Groups Fly-out, drive-out

APPENDIX B

SPEECHES FULL TEXT

VOCATIONAL TEACHER EDUCATION CHALLENGES

Rupert Evans

I do enjoy interacting with people in our field of vocational-technical education. Maybe one of these days we will start calling it occupational education. There is nothing wrong with the term "vocational education." It is just that there are some people who now call themselves technical educators in an effort to disassociate themselves from vocational educators and I don't like that at all. So somehow I would like to get us back together and that is going to be the theme of my talk here this morning.

I have been asked to talk about staff development, teacher education, and its challenges. If you take a look at the things that money can buy or that money can create in our field of vocational education, you will see things like buildings, curriculum, students, staff, equipment. But if I have to put my money on any one of these things, the place I'll put my money is on staff. There have been some mighty good schools run in some mighty poor buildings. It doesn't hurt the program any to be in a beautiful building, but give me my choice and I'll take a good staff. A good staff is going to create a good curriculum. It is going to attract good students and produce good results. And yet for some reason or other staff development rates as a very low priority in vocational education. Some states have carved up their teacher education programs like a piece of pie. They have handed a little bit to this institution and a little bit of it to that institution as a sort of political reward, I suppose. Others have divided the pie among different departments in one institution. The net effect is that we do not have a program of vocational teacher education, and that's a mistake. Basically, it is the result of low priority being placed on staff development. There are many states that for all practical purposes haven't changed their teacher education program since that carving up was done around 1920. And again that is a result of low priority on staff development. Why do we put such low priority on it? Well, there are many reasons.

One of the reasons is that vocational education has a history of going through cycles of very rapid expansion followed by plateaus of relative inaction. If you are not familiar with the economic concept of "acceleration," by all means get familiar with it, because it explains a great deal of what happens and doesn't happen

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Presentation given by Rupert N. Evans, Dean and Professor, Vocational and Technical Education, University of Illinois, Urbana, Illinois.

in teacher education in our field. About once a generation this country gets stirred up about shortages of skilled people. So we go through a very rapid expansion of vocational education. While we are in the midst of this expansion everybody is so busy expanding things, building new buildings, setting up new classes, finding warm bodies to teach these programs--they are so busy setting up programs--that they don't have time to develop staff. Then by the time they get caught up, this period of rapid expansion ends, we hit a plateau, and there are people in Washington who start making noises about "Let's kill all vocational education--we don't need it any longer." So people say there is no use in developing staff now because we are not going to need them. When you need the staff you don't have time to develop them. When you have the time to develop them, you think you don't need them. So it just doesn't get done.

I have hopes for the future. Fortunately, the Congress in 1963, made substantial changes in the basic laws under which we operate. I don't think we or they had more than the faintest idea of what they were passing then, and maybe it is a good thing we didn't know what they were doing. But now it is clear that they changed the law to say that from now on, in addition to being concerned about providing skilled manpower and womenpower for this nation, we're also to be concerned about developing people as individuals and that is going to be a matter of national policy. That is a basic change.

We haven't done much about it. In 1968 the Amendments were passed and Congress this time did know a little more about what they were doing and one of the things they knew certainly was that they were saying to us, "You have not been carrying out our mandate of spending your money, spending your time, and expanding your programs to serve people, and you had better start doing it. To make sure that you start doing it, we're going to do a little ear-marking, and here are some of the sorts of people we are saying you had better start serving, or else."

Now if I'm right, this new emphasis on serving people and developing people should help to cut through this acceleration business that we have been caught up in, in the past. Extreme shortages of skilled workers come and go, but people just keep coming year after year after year. In fact, some of the toughest problems of human resource development come during the periods of time when we don't need large numbers of new skilled manpower. So I am hoping that we will be avoiding attempts to cut the size of the program because "it no longer is needed." If I'm right, this will say to us that we do need staff continuously and allow us to get about the enormous task of providing quality staff on a continuing basis.

The second reason we have assigned very low priorities to staff development in the past is that we had at one time a pretty good on-the-job training program for leadership in vocational education. At one time, a person would start out teaching at the local level and then get moved into some kind of supervisory job at the state level; then he might move into the U. S. Office of Education, with a little more responsibility. Then he might go back to the local level as a local director and maybe become the state director and then perhaps even move into one of the top chairs in Washington. This moving through the chairs, with increased levels of responsibility at each move, was the prime way and a very effective way of developing leadership for vocational education. But this process has changed, now. It has changed basically because of salaries. A good person at the local level now is being paid more than the state is paying and he is being paid more than the U. S. Office could pay him. Besides, every time the U.S. Office has had an expansion in program or an expansion of responsibilities it has had a slash in staff, so there just aren't that many spots in the U. S. Office. It's a sad situation when, in order to get somebody to move to the state office you have to ask him to take a cut in salary. But that happens in state after state and the effect has been disastrous, because no matter how good a person is, he or she cannot develop fully with an on-the-job training program in one town. You just don't see the whole picture.

As long as we had this traditional pattern of moving through the chairs, we could get by without much of a program of staff development. But it is gone, it is not going to return, in my opinion, and this says we have to find more effective means of developing the staff we must have for survival.

How should we go about doing this job? I call your attention to a publication with which you ought to be familiar. Its title is "The Training of Vocational Teachers." It came out in September of 1964, and was prepared by the International Vocational Training and Research Center of the International Labour Office in Geneva, Switzerland. This reports the results of a series of conferences held in Europe on Vocational Teacher Training. There were twelve countries represented at this series of conferences, but nobody was there from the United States. We were invited, but nobody went, which is yet another indication of the low priorities on vocational teacher education.

In this publication you will find a discussion of practices and trends in these twelve countries. You'll find a great many problems that look remarkedly like the problems that we have here. They were suffering from a critical shortage of qualified instructors even when this was published five years ago. They talk about three groups of countries, with each of the three operating under a different set of principles for the training of vocational educators.

One group of countries primarily recruits teachers who have acquired skill through long experience in employment. They select someone with a great deal of experience in employment and expect to convert him or her into a teacher.

In another group of countries, among these twelve, teacher training is a continuation of the vocational training system. A student goes through the vocational training system and if he is particularly capable, they make a teacher of him. Then he goes back to staff the system.

The third series of countries listed in this publication makes their vocational teacher training almost completely parallel to the training of teachers for general education. The vocational teachers go through a collegiate teacher education program, with practice teaching, and then become full-fledged teachers.

As I studied this, I said to myself that what we really have in this country is all of those three systems. We have one of those systems in some of our vocational education fields and we have both of the other two systems in other of vocational education fields.

If you get right down to it, there absolutely is no agreement in this country about how we ought to train vocational teachers. We train teachers in agriculture education in markedly different ways than we train teachers in distributive education. It is almost, you know, as if we had been meeting as separate countries to lay out a philosophy of vocational teacher education--vocational staff development. In fact, when I picked up this program I said "here we go again," because I noticed a series of group sessions with segregation by subject matter, which looks traditional as can be. But then I saw a redeeming feature. Toward the end of the program there is a means of getting people together on a geographic basis, so maybe we have a chance of talking across some of the walls that have existed before. We can break through the customs barriers. We have to do this if we are going to make any progress toward building vocational educators.

Now don't misunderstand me. You have to have a field of specialization, you have to believe in it, you have to know it before you can teach it. But it is not enough to have a field of specialization within vocational education. Unless you know all of vocational education, you cannot perform effectively. If we don't talk together, we not only won't know about the whole field, we will have absolutely no means of developing administrators who can administer programs that cut across various fields, and we will have no way of building a unified philosophy of vocational teacher education and staff development.

Just to give you something to think about, I want to toss out five propositions. First of all, if we're going to have effective staff development, we had better start basing pay on merit and supply-demand rather than on hours of education and seniority, which is the way we pay practically all of our teachers. Secondly, I think we would be better off without certification of teachers than to have the present patterns of certification. Third, when we are looking at the development of staff, the university ought to and must assume prime responsibility for pre-service education of teachers in all fields of vocational education. Fourth, the prime responsibility for in-service education ought to be assumed by the state and local school district, primarily the latter.

Now don't misunderstand me. The university can't operate a pre-service program without heavy involvement of local education agencies and there are a few local education agencies that can run effective programs of in-service education without calling upon some university assistance. But I'm saying the primary responsibility for pre-service education ought to be placed on the university and for in-service education it ought to be placed on the local education agency. My fifth proposition is that we would do a tremendous amount of good for staff development in vocational education if we limited teacher tenure to ten years, with a possibility of renewal.

The first of these propositions was that pay ought to be based on merit and supply and demand rather than on hours of education and seniority. I recently visited a junior college in one of our states. (Not this one or my home state, either.) I went into this school and found a beautiful program in electronics technology. Not the usual type where you try to set up somebody in a small business which fails the minute he puts it into operation, but a program that is designed to prepare electronics technicians for the instrumentation industry. The two highest paid instructors in this junior college were the two instructors in this technician program, and both of them took two thousand dollar cuts in pay to become instructors. The graduates of that two year program were going and making more money in their first year than the other junior college teachers made, even though they had a masters degree. In fact, the graduates of this program, this two year program, were starting out at higher salaries than the graduates of the four year electronics engineering program at the state university near by. Now I think this is a mighty fine situation.

The president of the university had just been fired, and the faculty members were the principal cause of his dismissal. The faculty was up in arms, and one of the things they were saying was, "Here are two teachers that are being paid too much and we're being paid too little." As long as we have this crazy notion in education that people ought to be paid on the basis of the number of hours of education they have and the number of years of seniority they have, we're going to have poor programs in many fields. The world described by economists is a reasonably real world. Supply and demand exists in this real world. If you attempt to forget about supply and demand in recruiting teachers and in paying teachers, you are going to end up with poor programs with unqualified staff in those fields where you are not willing to pay the market price for faculty.

Figure 1 shows a graph that has pay on the vertical axis and years of experience horizontally. We pay teachers so that the graph goes upward in almost a straight line and in theory levels off when you get to some number of years of experience. After ten or twenty, and in some cases thirty years, it is supposed to level off. But if you replace that graph with one that again shows years of experience on the horizontal axis, but shows teaching effectiveness on the vertical axis, (Figure 2), that curve shows an average increase in effectiveness for about the first five years and then a trailing off in effectiveness if the person stays on the job for the rest of his tenure. You've hit your peak, the averages say, at about five years. But that is not the way we pay people. If we paid people differently, the right half of the curve would be markedly higher, for some of our best teachers leave teaching simply because they are not paid a salary which recognizes the good job they are doing.

I can't give you a graph on the relationship between hours of education courses and effectiveness, because there is no relationship. I won't go into all the reasons for it, but you can accept the fact that there is no relationship between hours of education and effectiveness as a teacher.

My second proposition was that in its present form we would be better off without certification than with it. College professors are not certified. There are lots of ineffective college teachers, and most of them are ineffective because they don't know how to teach. We do have certification in the public schools, but there are still plenty of poor teachers in these schools. Why are they poor? Some of them (in spite of the certification regulations), not only don't know how to teach, but they don't know the subject they are teaching. I was talking about this matter of certification with a local director of vocational education recently, and he said he gets "far better teachers in my evening program than in my day school program. And the reason is that I don't have to have the ones for the evening program certified." Now if he's right, and I've heard similar statements in more than one place, then something is surely wrong.

I am not suggesting the development of the certification procedures described in the European manual, I referred to a moment ago. They have some examinations for teachers which would curl your hair. They bear absolutely no relationship to the real world. But I think our typical certification procedures don't bear much relationship to the real world, either. Seven years of trade experience requires 14,000 hours of working, but it may produce a person who has absolutely no competence in what is to be taught. Such a person would be certified in almost every state. But someone else with a couple of years of extremely varied and increasingly responsible occupational experience is almost universally denied certification. This is absurd.

Our third proposition is that the primary responsibility for pre-service education ought to be in the hands of the universities with close support from local educational agencies. Pre-service education has to have technical content, plus general education and professional education. This sounds trite because we say we are all doing this, but I repeat my earlier statement that with virtually no exceptions in this entire country, there are no professional education programs for vocational educators. We have professional education programs for Home Economics educators. We have professional education programs for Health Education people, (which sometimes are tied in with Trade and Industrial Education, which I have never been able to understand). But there are almost without exception, no professional education programs for vocational educators in this whole country.

A second publication that I want to call to your attention addresses itself to both my third and my fourth proposition. It has the title, "Teachers for a Real World." I'm proud to say the person primarily responsible for this is Bunnie Smith of our staff at the University of Illinois. It is published by AACTE. The word vocational does not appear in this volume once. And yet I would admit that the message that is contained here applies 100 per cent to vocational and technical education. It has some very interesting sections: "Why teachers drop out?" "Why do 30 per cent of the people who complete the teacher education programs not go into teaching?" Why do 12 per cent of them drop out every year after they do go into teaching?" He talks about differentiated teacher roles. He talks about recruitment of teacher aides from the community.

I was talking Saturday with a girl who had just come back from Edmonton, Alberta. She told me about the fascinating year she has had working up there. Her field is education. More specifically, it is vocational education. She was assigned to work with four craftsmen in a vocational institute for the mentally retarded. These four craftsmen were all printers with various specialities within the field of graphic arts. They knew their occupations and knew them well, but they didn't know anything about how to teach that knowledge. She knew just a shade about printing, (she learned a lot more during this year), but she knew education. Now this is differentiated staffing. If half of the things that she told me were even approximately true, this use of differentiated staffing produced results well beyond anything that I've seen in a program of this sort.

Bunnie suggests, in "Teachers for the Real World," that there are better ways of preparing teachers than through student teaching. In fact, he advocates giving up student teaching. You must read the book to learn what he would substitute for it.

He has a delightful section about people in education having a blind confidence in the value of pooling personal experiences through group discussion, but he suggests that the only real value of this is for therapy. He has a delightful chapter on bringing the teacher trainer up to date. Since there is not one of us in this room who does not need some bringing up to date, I seriously commend this to your attention.

With regard to my third proposition, he says pre-service education should indeed be the responsibility of the university. He lays it out cold the way he thinks it ought to be. I don't agree with everything he says, but I surely agree with the excellent way in which he says what he does say and I like the provocative nature of his comments. It would surely make a great deal of sense for us to follow his suggestion that we each spend at least one month a year teaching in a local educational program or at least closely associated with it.

If you want a model of pre-service teacher education for vocational education, I would commend to you again the Edmonton, Alberta program, where capable employees are recruited, paid to go to school at a university for a year, with the pay being shared by the federal government, the province and the school that will employ the person. There is a close relationship between the university program and the local education agency. The people who are in training spend their year working on programs for the place they are going to work.

My fourth proposition is that in-service education ought to be the primary responsibility of the local education agency with some involvement with the university. The local school should keep the university involved if for no other reason than to re-educate the teacher educators. At one time I worked for General Motors, and learned that they have an interesting method of determining whether or not a supervisor is ready to be promoted. They feel that if he has not developed a capable successor then he is not eligible for promotion. Now this is not a perfect way of encouraging staff development, but I think it is a pretty reasonable one. It says first of all that if you don't have the capability of developing people, then you don't deserve a supervisory position. Secondly, it says that if you are not interested in developing people, then you are not ready for a supervisory position. This doesn't mean that the person who was trained will necessarily be promoted; it just says that the supervisor does not get promoted unless he has somebody who is ready to take over his job. I think this ought to be one of the things that we look at in our in-service teacher education programs.

A second ingredient that I would like to see in an in-service teacher education program is a regular exchange program with employers. We have provisions for this in the federal law and it would be easy to arrange this in today's labor market. All you would have to do is ask. An exchange of personnel has the obvious benefit of increasing the competency of the teacher, but it has the less obvious benefit of involving the employer in your program, and getting some of his key people acquainted with it.

My ideal program of in-service teacher education involves twelve month employment for every teacher, with nine months of teaching and three months spent on personal development, and with that personal development being mapped out in advance in an agreement between the teacher and his supervisor. All sorts of possibilities could be included in this in-service teacher training package. One three-month period might be spent back at a university. Another three months might be divided between two months of employment and a month in a company operated school. It might be three months spent on curriculum development. The program should include whatever is needed to develop the individual to the greatest extent possible. If we had this in even half of our vocational education departments across the country, in a period of two or three years we would completely revitalize the entire field.

I hope that some of the in-service time could be spent in visiting other schools. I am just horrified when I go into most local education agencies, (I don't care whether they are junior colleges, high schools, or elementary schools) to see the universal provincialism that exists. These people literally do not know what is going on outside their own community. Some of them, of course, don't know what is going on outside the walls of their school or even the walls of their particular classroom. But it is really shocking to see the provincialism of most of our teachers, and to learn that they just do not know what is going on even 25 miles down the road.

Of course, part of this in-service program ought to be attendance at, and participation in professional meetings. One comment about participation: twenty years ago, I would have given my right arm to have a chance to appear on an AVA program. Now I turn down chances to appear on the AVA program because I get a little embarrassed about being on it too frequently. Now this doesn't make sense. If half of the people on each panel were people who haven't been on the program before, we would surely not diminish the quality of what is presented and we would surely increase the in-service development of the people who were asked to appear. It is the same old characters who get on the program year after year.

My fifth proposition was we ought to have a limitation on teacher tenure, at least in vocational education. My suggestion is that we limit teacher tenure to ten years, with possible renewal. This would force us to take a look at the competence of some of our faculty members after they have been around awhile. Now, we look at competence only at the time of hiring and at the end of probation, and we know little about actual performance at either time. Even if we did, we would find that there are remarkedly high proportions of teachers, not just in vocational education, who look pretty good during the probationary period, but the minute they get tenure, they retire on the job. Those people ought to be eliminated. Well, no that's too strong. We don't want to eliminate them, we just want to give them an incentive so that for the next seven years after the three years probationary period, before they really go on tenure, they have a chance to have some encouragement to continue to look as good as they did during the first three years.

Take a look sometime at the typical vocational department that has been in operation for more than ten years and compare it with a vocational education department that has been in operation for two or three years. Almost invariably you will find that the young program, the new program, looks better than the old program. Almost invariably. And it ought to be the other way around. The older teachers are more experienced and they have had time to accumulate equipment and prepare instructional material. But usually the best program is operated by the young and energetic group that hasn't had a chance to settle down into a rut. Please note again that this is not the way we pay people.

If we put this suggested tenure limitation on a positive basis, instead of on the basis of who is going to be fired, we would emphasize a ten year individualized staff development program, planned cooperatively by the teacher and the administrator. If this individualized staff development program works, keep the person at the end of ten years, otherwise, fire him. If any of you have a voice in determining who ought to be an administrator in vocational education, then I'd say the key criteria for choosing your administrator is "does that administrator have a strong record of developing staff?" If he has it, you're pretty safe in employing him, regardless of what he doesn't have. But if he doesn't have a good record of developing staff, then you are on shaky ground in employing him, no matter what his other qualifications are. This is another way of saying that if too many teachers need to be fired after completing their ten year personal development plans, perhaps it is the administrator, not the teachers, who should be replaced.

I haven't said very much to you this morning. Really all that I have said is that we don't have a program of vocational education teacher development, staff development. We have little fragments operating as if they were separate countries with barriers that are higher than customs barriers built between real countries. We can't have an effective means of developing people, when we have staff who are trained this way. If you charge staff to develop people, then you have to know what kind of program is going to best fit particular individuals. If your goal is to develop skilled individuals for a particular occupational field then you could conceivably get by without knowing the rest of the world of work.

You could use the Russian system: "you, you, and you are going to be in occupation X." And you could proceed to make them efficient in occupation X. But in a democratic society, a narrowly trained teacher can't counsel with, and can't really teach an individual. Remember that our goal is the development of that individual's greatest potential, developing that potential and taking it just as far as you can. You cannot do this, unless you know something about all education, and something about all of vocational education, as well as having a special field of competence.

I have also suggested some ways of getting over some of the things that I see as hang-ups in staff development. I don't expect you to buy all of these. I hope you will think about them. I don't care if you reject them, but see if they make any sense. Perhaps this afternoon we will have an opportunity to talk about some of their implications.

It is an honor to be asked to be the lead-off speaker for a conference program of this quality with the very capable participants who are here. I would welcome an opportunity to talk with you as individuals during the next day and a half. I have to go back because really this is my last official act as Dean of the College of Education of the University of Illinois. I am Professor of Vocational and Technical Education and I hope my job means exactly what the title says. It is good to be here.

SYSTEMS ANALYSIS IN EDUCATION

Walt Le Baron

I would like to start by sharing with you a list of "prejudices" I hold as I confront this group. This seems important, because as a systems analyst, speaking to a group of vocational teacher educators, I probably represent some ideas which will sound strange to you. Indeed, no one seems quite sure what a "systems analyst" is, especially in the field of education, and I include myself among those confused by the label. In addition, I know virtually nothing about vocational education, so my qualifications for addressing this meeting are definitely suspect.

Here then are some of the prejudices which I brought to this meeting and, I am sure, will underline anything I say.

First, I believe that every student, by the time he finishes high school, should qualify for some specific vocational endeavor. Regardless of future college plans, every student should be familiar with the realities of the world of work. Second, I am concerned that the centrality of work in the American ethic is waning. There is a growing trend towards hiring the "person," not the "worker." What I mean is a real trend in the direction of hiring a person who has a number of general skills, rather than workers specifically trained to put square pegs in square holes. This consideration, it seems to me, is basic to any program of vocational preparation.

My third prejudice is one which Dean Evans has already suggested: that communication between the institution and the client population is perhaps the single greatest problem in education today. We are simply not listening to students, or we are simply not using effectively the kinds of information channels within the institution (and the culture) which could effectively improve its operation.

My fourth prejudice will perhaps become more meaningful during my talk. It concerns an attitude towards the philosophy of education called behaviorism. This orientation seems useful for planning

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effective programs, but it is not the be-all and end-all of educational thinking. Systems analysis frequently appears to account for the entire scope of the problem. In education, however, much cannot be specified or quantified. Caution is required to insure that our enthusiasm for planning does not exceed our ability to explain the system.

My fifth and last prejudice is this: Systems analysts usually work with or near computers, but the real problem, or set of problems, that educators have to deal with is not concerned with computers or other technological gadgets. The real problems are in understanding that we live in an age when decisions are based on information.

This is an age of data. The collection, handling, and control of data is the key to effective long range planning. The problems that I will discuss are not hardware problems--the technology of the machine; rather, they are concerned with ways of thinking about educational planning. These then are the prejudices with which I will approach the discussion of vocational teacher training.

An Introduction to Systems Analysis

"Systems Analysis" has become a popular catchword indicating a process for the application of scientific thinking to large problems. The phrase is used indiscriminately to mean the analysis of information for computer programming, the development of planned management activities, or, on other occasions, simply the orderly relationship between any two or more things or ideas. These uses, at least in the popular sense, seem to convey some special magic of science.

There has never been one system methodology; indeed, the tradition of systematic analysis in one sense is as old as Aristotle. What is new, though, is the concentration on quantifiable aspects of analysis (to the extent that this is possible), and on the isolation and control of the numerous factors and variables made possible through the power of the computer. This, in turn, has led to a revolution in our thinking about the nature, organization, and use of information, so that at the heart of systems procedures there exists a philosophy of information.

A Brief Description of Systems Theory

The word system is used to communicate many different ideas, but in this paper it should be thought of as indicating a process. In briefest form, "systems analysis" is an orderly process for, first, defining and describing a universe of interest (and the significant factors and their interrelationships within the universe);

and, second, determining what changes in the universe will cause a desired effect. Systems analysis generally begins with the broadest statement of the universe and then isolates and defines parts of the system according to their functions, and then notes the interrelationships among these functions.

There are different approaches to the description of systems. The following, among many, will be appropriate for the present review:

1. Subsystem Description. A subsystem is an operational entity within a system capable of functioning independently or of permitting independent design and analysis. Critical factors in the selection of sybsystems include, first, the explication of a major process within the system, and, second, a clearly understood relationship between the operation of the subsystem and the goals of the system.

Each subsystem description would contain information on the men, materials, etc., required for its operation, because the subsystem is an operating entity contributing to the goals of the system. Most significantly each subsystem would be described in terms of its goals and the process for achieving these goals. The resources required by each subsystem could be determined in relation to its goals.

2. An Input-Output Model. Input-output models for educational planning have received considerable attention since the advent of PPBS (Planning-Programming-Budget Systems). These models begin by describing the desired outcomes of the system and then determining the changes necessary to achieve these outputs. For instance, in planning a program of teacher education, one would first describe the profile of the finished product, i.e., the trained teacher, and then determine what changes would be required in program entrants to achieve this end-product. Inputs to the system would also include the necessary staff and other resources required to operate the program.

There is, of course, an inherent dilemma in this kind of planning. No adequate, or relatively homogeneous description of the product (the teacher) can be postulated, and, therefore, any satisfactory program model would have to begin at this point. An input-output model in teacher education would be useful only to the degree that a relationship between this "picture" of the teacher and the program of preparation could be shown and that feedback procedures could be implemented to govern the process. This, in turn, implies that knowledge of the objectives is the first requirement of system design and evaluation.

3. The "Heuristic" Approach. This third aspect of system theory is more complicated than the preceding two, but it is most useful when the specific nature of the product cannot be clearly stated. Boguslaw suggests that this approach "is not bound by preconceptions about the situations the system will encounter. Its primciples provide action guides even in the face of completely unanticipated situations and in situations for which no formal model or analytic solution is available."

The critical aspect of this concept is the use of principles to guide action; again, the process is central to the analysis, governed by a statement of direction or goals. In other words, the set of principles should permit the establishment of a program to achieve specific ends regardless of the conditions under which the program might operate. Perhaps the best example in vocational education is the profound change between the vocational legislation prior to 1963 and the present enactments. In the first instance, there was a specific charter to train persons for various occupations, the priorities having been established by analyses of the work force. From 1963 on, however, there has been a clear charter to educate each individual attending school for the world of work. The charter has changed radically from the earlier one of simply educating for specific jobs to one of educating every person for work. In brief, the whole basis of vocational education has changed, and there will clearly be a need to rethink the whole system.

A Total Design Process

One of the major problems with the application of systems analysis to education is a failure to consider a total design process. The design of an operational system represents only one aspect of a total design process. Frequently, however, systems analysts and educators alike assume that they have dealt with the whole process when the design is completed. The result has been many magnificiently engineered systems which fail to achieve their goals.

There are three elements in a total design process. The first is the conceptualization and design of the operating system which we have discussed. The second is a careful analysis of the environment in which that system is going to operate. The third element is a change and implementation process which will prepare the environment to accept the new system. Each of these three elements has been discussed at great length over the past years, but only infrequently are relationships among them considered.

Constraints on Systems Design

Systems analysts are fortunate in one respect. They can spend much of their time designing ideal systems, sometimes without reference to reality. When vocational teacher educators think of new designs, however, they are keenly aware that they must live with their programs. The thrust of day-to-day operations provokes a different perspective. Yet, while dreaming up new designs, the systems analyst recognizes a number of constraints will operate to control him. The following can be mentioned as important:

Time: Usually a person must be educated in twelve or fourteen years. If our task is vocational competence at graduation, it must be achieved in this time limit. Actually, with careful planning less time may be required, but then we encounter the problem of releasing a student prior to the end of a twelve year program. At present time constraints are rather firmly established.

Data: Perhaps the most important constraint is data. In many areas of education we have only inadequate concepts of the data required for systems design. In other areas, the collection and organization of data are major problems. But, basically, we have not yet learned to use the data we have as a basis for systematic planning.

The Scope of the System: The broader the initial conception of the system, the stronger will be the design of any sub-universe. For instance, a teacher working in the self-contained classroom frequently does not know what goes on outside his classroom. He may have designed an absolutely perfect system for that classroom (we will assume that is possible) but it has no relationship with the rest of the system. The problem here is in the scope of the system. One reality for vocational education has been the necessity for integration with general education. Distinguishing between the two, however, is difficult, yet each is designed independently. As a result, there is a continual overlapping of activities and content in programs of vocational preparation.

Communications: Any system is limited by the ability of the parts to communicate with each other and by its ability to communicate with other systems. Who are the people we can talk to and under what circumstances? Do you as vocational teacher educators have much opportunity to talk with the industry people? Or do you get a chance to talk with former students, say five or ten years later? Other communications difficulties come quickly to mine. In some instances a problem can be solved and communication established. Other times, however, no communication is possible, and we must recognize a limit on the system.

Integration: It is often possible to design a beautiful system, one which is consonant with our view of reality, but then have it fail because it does not resemble the eal world of other system designers. A particular constraint of this nature in vocational education is the existence of special facilities. For instance, the regional vocational school works well for some programs, but it may be a significant detriment to change. Since you have already got these buildings, they must be used until a sufficient return on the investment can be recognized. The process of obviating these difficulties is called integration. It requires that the designers of a system, regardless of how complete the system may be, must be aware of that system's ability to mesh with other systems.

Resources: Resources are of many types to a systems analyst. While money is the most obvious, skill, trained manpower, time, data, and expertise are recognized. We don't always know what the resources are, but in systems design we are usually concerned with the wise use of the critical resource.

Constraints on Teacher Education Programs

The above list of constraints can apply to the design of any program, and each planner must apply these principles to his work. In the field of teacher education, several specific constraints can be mentioned. Some of these define the limits of potential programs, because they can be modified only within fixed limits. Indeed, changing them requires changing our perceptions of teachers in rather radical ways. This may be a necessary concomitant to the improvement of teacher education, but it is a slow process. Nevertheless, in some form or other, the following constraints will affect the program planning:

1. Certification Requirements: Each state establishes minimum requirements for the certification of professional personnel. In the field of teaching much progress has been made towards establishing uniform certification and towards focusing the proficiency measures on the teacher education institution. The state still sets the standards, but the college certifies that graduates of its programs have met these standards. In one sense, this implies a hardship because the granting of a degree is universally accepted as evidence of qualification to teach. It may be conjectured that other avenues of entrance, among them the new careers profiles, offer viable alternatives to the four year undergraduate program.

2. Local and State Personnel Policies: Personnel policies are established to govern the behavior of individuals within complex organizations. Usually, these large institutions require some form of structure to promote their purposes. On the other hand, personnel

policies sometimes vitiate against the kinds of individuals who can make a positive contribution. "Adjusting to the realities of teaching" rather than "developing the person as a teacher" too frequently governs the design of programs.

3. Individual School Administrators: The building administrator is usually free to rule within his four walls and football field such as he sees fit. His style of leadership will determine both the tone of the school and the quality of the education. He usually selects teachers with whom he can get along. While this management technique appears reasonable, it can serve to limit the kinds of experiences available to students.

4. Parents Anticipations: To a considerable extent, teacher behavior is limited by the anticipations of parents. Frequently, effective teaching methods and styles must not be used because the community does not find them acceptable. In particular the disparity between teacher behavior, as considered desirable by parents, and the kinds of behavior which meet the child on his own level, can cause conflict for the teacher. Unless a program of public relations is carefully developed, new forms of organizing for teaching--teacher aides, clerical assistance, team teaching--will meet with criticism, usually good intenioned out of concern for the child.

5. The Profession: The teaching profession, at best highly conservative and inbred, fears radical departures from present practices. On the other hand, a new breed of teacher, militant, liberal, and action oriented, finds itself defeated by outdated administrators and unresponsive school systems. Or again, teacher activism concerns itself with pay and prestige rather than with problems of change and education. Still a fourth point, little progress could have been made in American education without an organized profession of teachers. Regardless of the stance, and there are many to choose from, the profession, through its several agencies and organizations, advises, directs, and censures many practices in teacher education.

6. The Teacher Candidates: Teacher education programs must be responsive to the persons who apply for admittance. During the past two decades numerous authors have pointed out that the lowest calibre of university student enters the field of education, and, consequently, quality programs must be "watered down." Other writers have suggested with equal force that good programs will attract strong candidates. There is virtue in both positions. Yet other studies indicate that even graduates of strong programs leave teaching after three or five years unless they have "acculturated" to the existing limitations of the school. At best the very conditions of teaching seem to limit the effectiveness of strong college programs.

Systems Analysis as a Step-by-Step Procedure

There are six steps in the process of systems analysis. Each step requires its own group of techniques and suggests a different set of problems and limitations.

STEP ONE: CONCEPTUALIZING THE SYSTEM OR THE "PROBLEM UNIVERSE"

The first step develops a clear statement of the system of concern. This definition includes all those elements which are a part of the problem universe. The analysis also sets limits to the problem by separating the system from its environment and by relating it to other distinct systems. Every system is a subsystem of some larger system and is composed of a hierarchy of subsystems, sub-subsystems, etc., each of which is a system in its own right. The system analyst, therefore, must select a universe which is consistent with the purposes of his analysis. A useful and productive analysis is distinguished by the formulation or design of the problem, the selection of appropriate objectives, the definition of the relevant and important environment or situation in which to test alternatives, and the provision of reliable cost data and other pertinent information.

Vocational education can be viewed as a system in itself, but an effective orientation requires that it be seen as one aspect of a manpower development program, through which society provides itself workers for a constantly changing world of work. In this respect public school vocational education can be related industrial and government sponsored remedial and special programs and to other, non-public school vocational programs. Within this broad conceptualization of a system, we can define vocational education as our area of concern.

STEP TWO: DEFINING THE "SUBSYSTEMS"

A subsystem is an operational entity within a system, capable of functioning independently or of permitting independent design and analysis. Sybsystems are defined according to sets of common properties. In the design of weapons systems, the major sybsystems are hardware, training (or personnel), and administration. Subsystems interact at the system level through a process called "systems integration."

We can define some major subsystems for vocational education including a curriculum subsystem (to include a number of distinct curriculums) a teacher education subsystem, a guidance subsystem, a research and development subsystem, and an administrative (or operating) sub-system. Other subsystems could be mentioned, but these represent the major ones for our planning purposes.

STEP THREE: STATING THE OBJECTIVES OF THE SYSTEM

Systems procedures have sometimes been defined in terms of two basic operations; first, state the goals for the resolution of a problem; and second, organize the means to achieve these goals. In any event, the critical point in understanding or using system procedures rests on the importance of clearly explicating the objectives of the system. Indeed, every element within a system is evaluated in terms of one basic question: Does it contribute effectively to the achievement of system goals? A mechanism, therefore, for determining the objectives of the system, for ranking multiple objectives, and for choosing between incompativle objectives is a first requisite for effective systems planning.

One of the problems in stating objectives is to insure consanance between the objectives of the individual and those of the organization. Learning goals for an individual can be stated in specific behavioristic terms or as braod philosophical aims. The organization then establishes operating goals which, hopefully, reflect their learning goals. The organization's objectives, however, find expression through the budget and the values of the organization.

STEP FOUR: DEVELOPING ALTERNATIVE PROCEDURES

Once the goals for the system have been established, the system designers will explore the various alternatives available to them for the accomplishment of the goals. Alternatives may be designed to utilize various uses of resources (especially cost levels) to indicate different career paths based on variations in entry profiles, and to develop operating relationships which are necessary for implementing new technologies.

As alternative procedures are designed, it is important to predict the consequences of selecting one alternative over another insofar as this is possible. For instance, what are the implications for the total system on a program based on considering the student's time as the critical resource? Or, what will be the differences in appreciation for a subject if it is learned through a series of programmed instructional units rather than in a group situation? Each program designer should conjecture both the positive and negative consequences of decisions about alternatives.

The story is told of a teacher who, having great difficulty with a pupil, consulted her supervisor. She explained the problem, the pupil's reactions, and her behavior. After listening to her story, the supervisor asked her what alternative strategies she was using to cope with the situation. The teacher looked confused. As it turns out, she was simply unaware of any alternatives.

Too frequently in educational planning we begin by explaining why something can't be done, what resources are unavailable, or which regulation prevents trying out an idea. Such attitudes effectively prevent the serious design and consideration of alternatives. What is first required is a great deal of thinking about ideal programs and resources. One can always cut back as reality demands, but if we never design an ideal program, or think about using new techniques, we will never have a basis for growth and change.

STEP FIVE: SELECTING THE BEST ALTERNATIVE

The selection of the best alternative depends upon inherent values of the community, the school, and the future. It is at this point that the philosophical orientation of the decision-maker becomes relevant. Having determined that the objectives can be accomplished, and that an effective system can be implemented, careful consideration should be given to the extent to which the job is worth doing, and then whether it is worth doing through the use of the most effective or most efficient system.

STEP SIX: IMPLEMENTING THE SYSTEM

Assuming that sufficient resources are available, systems implementation should be relatively automatic if the system has been carefully designed and tested, but systems procedures include several important aspects of implementation. One is feedback. This effort continues throughout the operation of the system in order to assist three purposes:

1. The continuing effectiveness of the system or the requirement for changes.
2. The continuing relevance of the system in terms of its objectives.
3. The need for the creation of new systems as a result of changing objectives, new developments, or new criteria for selecting alternatives.

Applying Systems Analysis to the Design of Teacher Education Programs

The systems analyst, as he looks at the process of teacher education, would be concerned with selecting an approach and explicating the constraints. To aid him in this process, he might ask himself the following questions:

1. What are the functions and tasks of teachers in the context of the school environment?
2. What do we want the teacher to do in the learning environment?
3. What knowledge and skills are required in order to perform these functions and tasks?
4. What experiences would reinforce that knowledge and give the prospective teacher the chance to practice the tasks?
5. How can this analysis of functions and concomitant knowledge and experiences be stated in terms of program goals?
6. How could a program of teacher preparation be organized to achieve these goals?

These questions then suggest a number of program construction guidelines--heuristics--which can be applied with greater or less reasonableness to the design procedure. The following guidelines, therefore, are merely generalizations. Each person designing a model would need to restate the question in terms of his operating environment and program goals:

- All program experiences should come from statements of goals and should be related to these goals.
- All program experiences should provide a thoroughness and understanding of the basic concepts of the subject under consideration, including the ability to discover and to apply this knowledge.
- All program experiences should be designed for effective presentation, including the maximum of student activity, utilizing the modes known or rationally assumed to be most effective for presentation.
- All program experiences should be designed for maximum efficiency in presentation, based upon preservation of the critical resource, which, in this case, is assumed to be student time.
- All program experiences should utilize measures of cost effectiveness in development and presentation, insofar as cost effectiveness does not require sacrifice of the critical resource, student time.
- All programs should be organized sequentially, insofar as this is possible, to include attention to individual cognitive styles, prior background and experience, and special learning difficulties.
- All programs should be designed to provide a constant system of feedback, first to the student on his progress and standing, second to the teacher on the success of the particular program, and third to the institution on the relation of the particular program to the total program of teacher preparation.

These questions and concerns form the basis for a "teacher education output analysis." Two convenient points were selected, the end of the basic training program and the end of the in-service program. At each point a number of goal areas were designated as a basis for program planning. These are shown in Chart 1.

This analysis of goals then led to a design for a teacher education program which could be organized into various components, but the general design of each component remains the same. It

TEACHER EDUCATION PROGRAM OUTPUT ANALYSIS

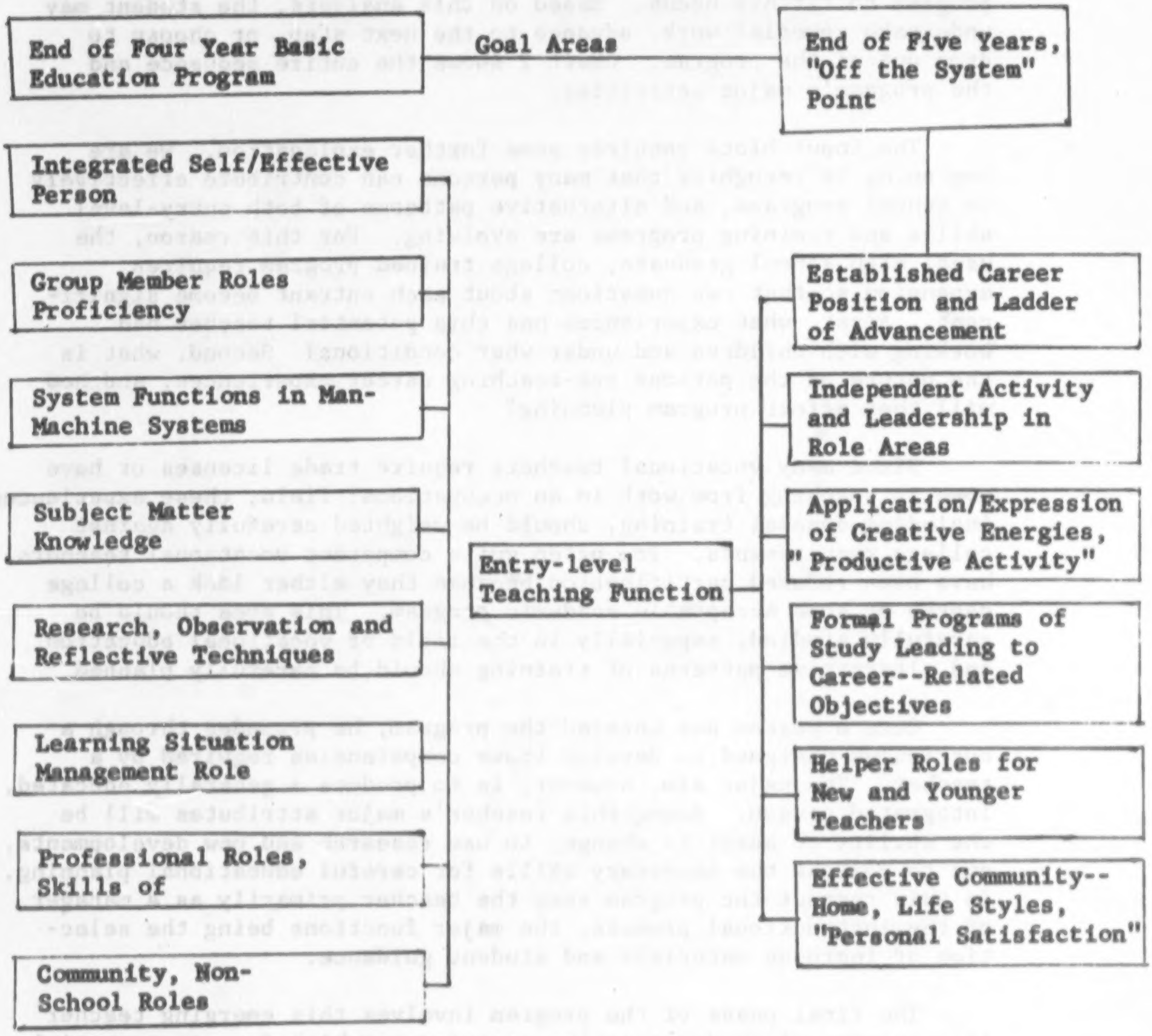
End of Four Year Basic Education Program
Goal Areas
End of Five Years, "Off the System" Point
Integrated Self/Effective Person
Group Member Roles Proficiency
System Functions in Man-Machine Systems
Subject Matter Knowledge
Research, Observation and Reflective Techniques
Learning Situation Management Role
Professional Roles, Skills of
Community, Non-School Roles
Entry-level Teaching Function
Established Career Position and Ladder of Advancement
Independent Activity and Leadership in Role Areas
Application/Expression of Creative Energies, "Productive Activity"
Formal Programs of Study Leading to Career--Related Objectives
Helper Roles for New and Younger Teachers
Effective Community--Home, Life Styles, "Personal Satisfaction"

Chart 1

includes an input block, a content block, an output block, and a review block. At the completion of each component the student is asked to evaluate his progress, review his goals, and adjust his program to fit his needs. Based on this analysis, the student may undertake remedial work, advance to the next step, or choose to drop out of the program. Chart 2 shows the entire sequence and the program's major activities.

The input block requires some further explanation. We are beginning to recognize that many persons can contribute effectively to school programs, and alternative patterns of both entry-level skills and training programs are evolving. For this reason, the usual high school graduate, college trained program requires expansion so that two questions about each entrant become significant. First, what experiences has this potential teacher had working with children and under what conditions? Second, what is the nature of the persons pre-teaching career experiences, and how will they affect program planning?

Since many vocational teachers require trade licenses or have come to teaching from work in an occupational field, these experiences, including special training, should be weighted carefully against college requirements. Too often quite competent vocational teachers have been refused certification because they either lack a college degree or some acceptable academic program. This area should be carefully studied, especially in the field of vocational education, and alternative patterns of training should be carefully planned.

Once a person has entered the program, he procedes through a curriculum designed to develop those competencies required by a teacher. The major aim, however, is to produce a generally educated, integrated person. Among this teacher's major attributes will be the ability to adapt to change, to use research and new developments, and to possess the necessary skills for careful educational planning. In this respect the program sees the teacher primarily as a manager of the instructional process, the major functions being the selection of learning materials and student guidance.

The final phase of the program involves this emerging teacher in a program of guided teaching experiences which form a sequential introduction to teaching. During the entire training program, the teacher candidate has been practicing the skills of teaching. This final phase, however, conceivably of one or more year's duration, provides a carefully supervised opportunity for practice, experiment, and personal growth.

TEACHER EDUCATION PROGRAM COMPONENT FLOW CHART

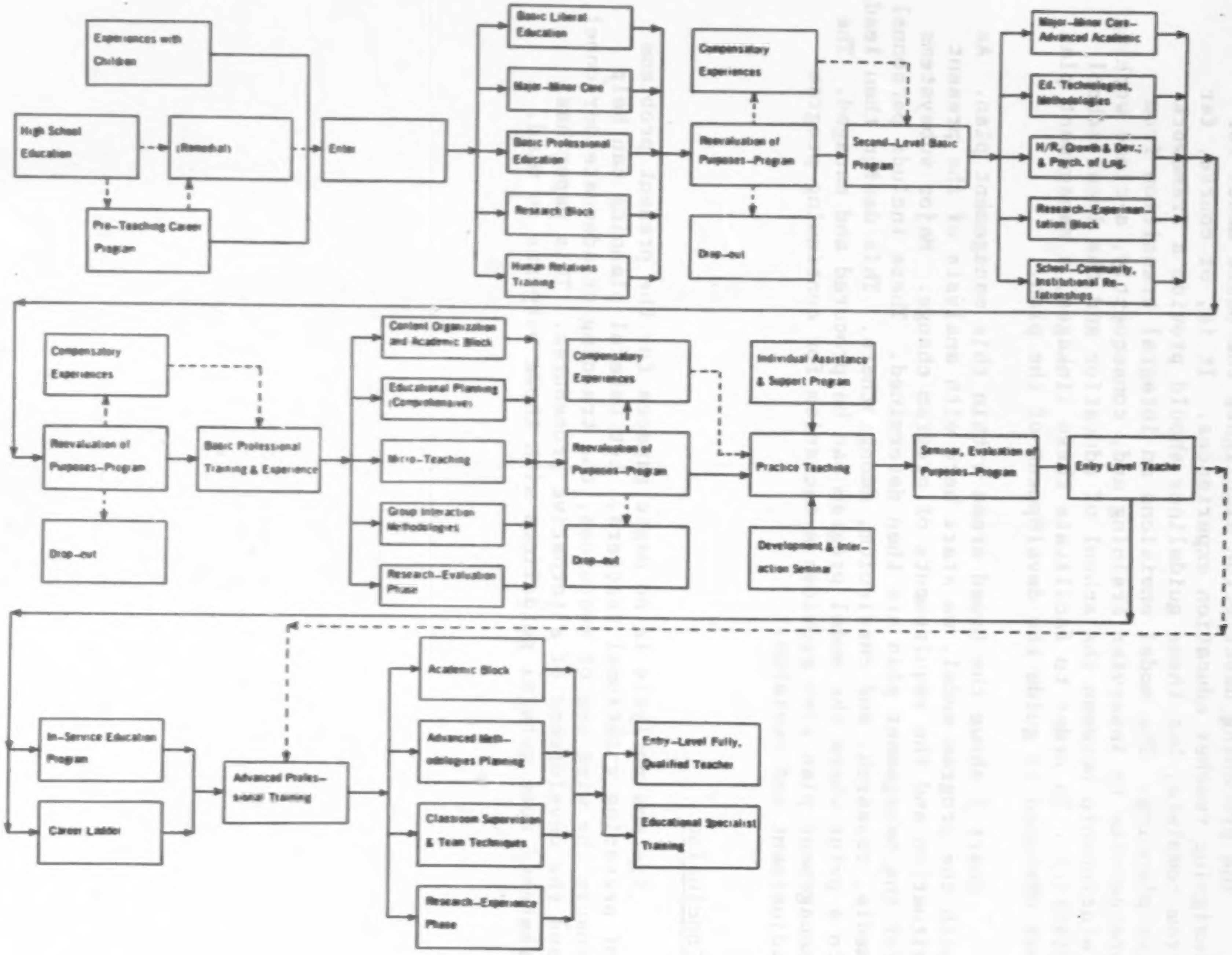
Experiences with Children
High School Education
(Remedial)
Pre-Teaching Career Program
Enter
Basic Liberal Education
Major-Minor Core
Basic Professional Education
Research Block
Human Relations Training
Compensatory Experiences
Reevaluation of Purposes-Program
Drop-out
Second-Level Basic Program
Major-Minor Core-Advanced Academic
Ed. Technologies, Methodologies
H/R, Growth & Dev.; & Psych. of Lng.
Research-Experimentation Block
School-Community, Institutional Relationships
Compensatory Experiences
Reevaluation of Purposes-Program
Drop-out
Basic Professional Training & Experience
Content Organization and Academic Block
Educational Planning (Comprehensive)
Micro-Teaching
Group Interaction Methodologies
Research-Evaluation Phase
Compensatory Experiences
Reevaluation of Purposes-Program
Drop-out
Individual Assistance & Support Program
Practice Teaching
Development & Interaction Seminar
Seminar, Evaluation of Purposes-Program
Entry Level Teacher
In-Service Education Program
Career Ladder
Advanced Professional Training
Academic Block
Advanced Methodologies Planning
Classroom Supervision & Team Techniques
Research-Experience Phase
Entry-Level Fully, Qualified Teacher
Educational Specialist Training

Chart 2

A Management Plan

The preceding description highlights the basic model for designing teacher education experiences. It is, of course, far from complete, but these guidelines should provide a framework for planning. The model envisions an integral transition from pre-service to inservice training and, consequently, a close working relationship between the school of education and the local school district. In order to facilitate these linkages, a management plan was designed to guide the development of the plan.

Chart 3 shows the broad areas within this management plan. As with the program model, we start here with analysis of the present situation and the requirements of program change. Major subsystems for the management plan are then determined. These include personnel, media, research, and curriculum, among others. This design then leads to a point where the model program can be procured and managed. The management plan also provides a mechanism for continuing program adjustment and revision.

Conclusion

Systems analysis is no magic panacea for the present problems of preparing vocational teachers, but careful planning can help insure the wise use of resources, the training of adequate personnel, and the development of alternative procedures. This paper has sketched some general guidelines with these purposes in mind.

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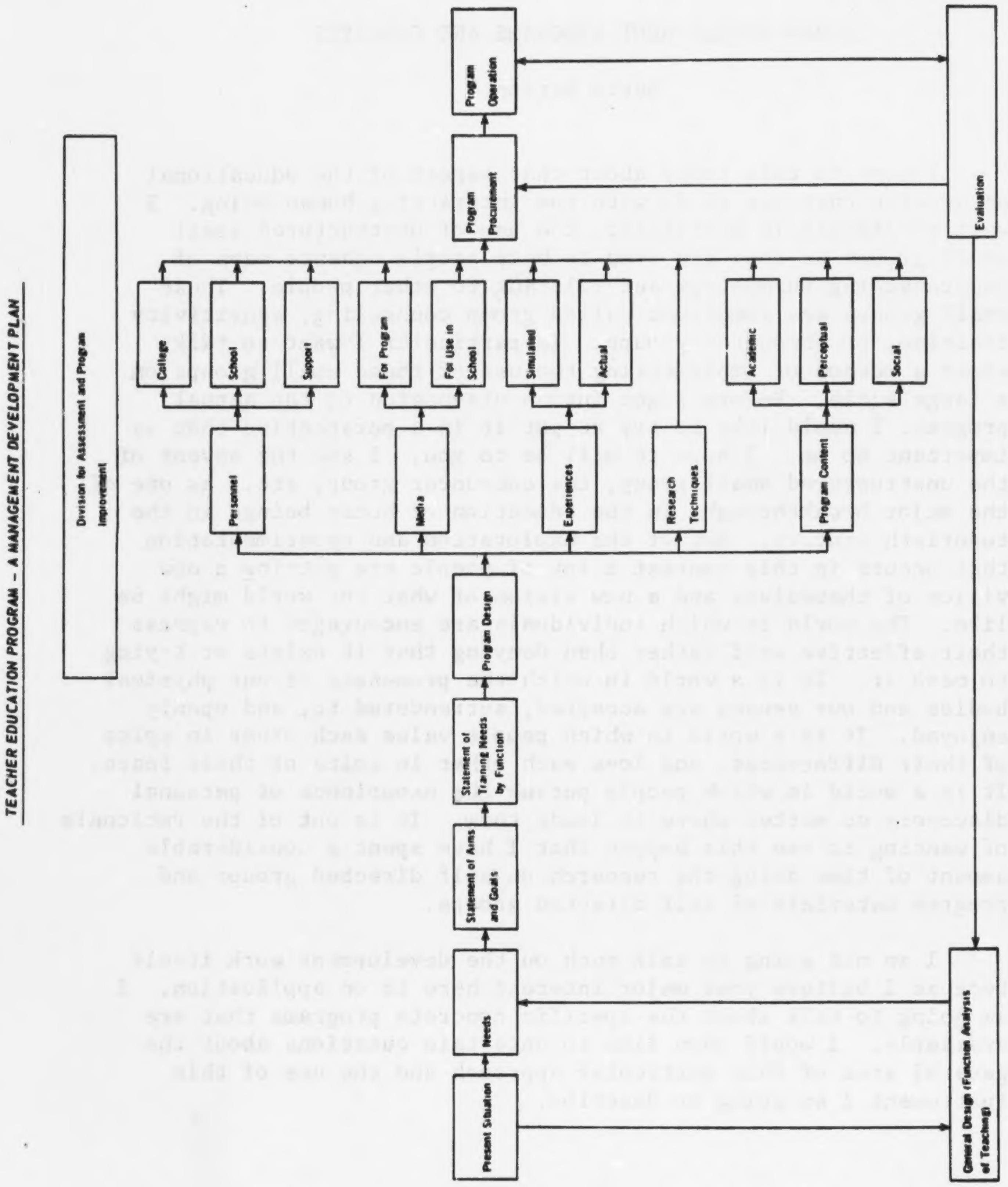

TEACHER EDUCATION PROGRAM – A MANAGEMENT DEVELOPMENT PLAN
Division for Assessment and Program Improvement
Present Situation
Needs
Statement of Aims and Goals
Statement of Training Needs by Function
Program Design
Personnel
Media
Experiences
Research Techniques
Program Content
College
School
Support
For Program
For Use in School
Simulated
Actual
Academic
Perceptual
Social
Program Procurement
Program Operation
Evaluation
General Design (Function Analysis of Teaching)

Chart 3

HUMAN DEVELOPMENT PROGRAMS AND CONCEPTS

Betty Berzon

I want to talk today about that aspect of the educational enterprise that has to do with the interacting human being. I want to discuss in particular, the use of unstructured small small groups as they are used to help people enhance ways of understanding themselves and relating to other people. These small groups are sometimes called group counseling, sensitivity training, or encounter groups. In particular I want to talk about a method of implementing the use of these small groups on a large scale. Before I get into a discussion of the actual program, I would like to try to put it in a perspective that is important to me. I hope it will be to you. I see the advent of the unstructured small group, the encounter group, etc., as one of the major breakthroughs in the education of human beings in the twentieth century. Out of the exploration and experimentation that occurs in this context a lot of people are getting a new vision of themselves and a new vision of what the world might be like. The world in which individuals are encouraged to express their affective self rather than denying that it exists or trying to mask it. It is a world in which the processes of our physical bodies and our senses are accepted, surrendered to, and openly enjoyed. It is a world in which people value each other in spite of their differences, and love each other in spite of their fears. It is a world in which people pursue the experience of personal discovery no matter where it leads them. It is out of the rationale of wanting to see this happen that I have spent a considerable amount of time doing the research on self directed groups and program materials of self directed groups.

I am not going to talk much on the development work itself because I believe your major interest here is on application. I am going to talk about the specific concrete programs that are available. I would then like to entertain questions about the general area of this particular approach and the use of this instrument I am going to describe.

Presentation given by Betty Berzon, Director, Bell and Howell Human Development Institute, Los Angeles, California.

1. The Encounter Tapes

We began the first program that came out of the research at the Western Behavioral Science Institute. It is called "Encounter Tapes for Personal Growth Groups." These programs are being distributed through the Human Development Institute which is a subsidiary of the Bell and Howell Company and the organization with which I now work. Let me tell you what I mean by the term program. These are pre-recorded audio tape recordings on which there are instructions for a series of sessions that a small group goes through together. The important part about this is not what comes off the tape recording but what happens among the people in the group as a result. The initial program is ten sessions. Its main focus is on the use of activities that are designed to accomplish the involvement of the group members; the focusing on certain critical issues that we know from experience are particularly relevant to the personal growth of individuals. The purpose is to make it possible for large numbers of people to obtain this kind of learning experience any time, any place without the necessity of a professionally trained leader, all they need is a room and a tape recorder. The feature of this program is the focusing on the here and now. The instructions on the tapes do not encourage digging up historical material or discussion of the past. The emphasis is on the participant's strengths rather than on their weaknesses. Emphasis is on experience as opposed to cognitive learning, the experience of yourself in relation to other people, acquiring feedback of how you come across to them, and the opportunity to do that for others. There is a minimum of cognitive influence in these programs and a maximum of experiential learning. This is particularly important for two kinds of groups. People who do not have well developed verbal skills and people who have verbal skills that are too highly developed. The use of a program like the one I just described might be a training vehicle for task oriented groups as a means of learning about group dynamics and how people relate to each other; as a means of identifying and developing the leadership in a community or organization; as a means of promoting a better kind of interpersonal experience; as a way of opening up within the staff of an organization, communication and improved ways of learning and so on.

2. The Vocational Education Tapes

Let me now speak about the programs that have come along subsequent to the original personal growth program. The second one in this series and the one that is recently available, the one I am sure would be of interest to you, particularly, is called "Encounter Tapes for Vocational Education Groups." The general goal of this program is to enhance the vocational potential of individuals who use it to give them better ability to experience themselves in relation to others. Here we get into the education of the interacting human being. The vocational education program was actually developed through experimental sessions with rehabilitation plans done in California, but it has since been modified so it is useful for almost any group. The more highly motivated the participants are the more they are going to get out of the program. It was initially developed for a non-verbal population session. First is an orientation session to present a set of ground rules for the participants as to how to be a good group member. There are people who do not know what we mean when we talk about feelings even though they think they do and consequently there has to be a fair amount of orientation to what this really means. In this program, we present the participants with a list of ten characteristics that an employer looks for in an employee. These are heavily weighted with interpersonal factors that match the elements of the ground rules for the group. You have the person being oriented to the experience of "here is how you learn the most in a group like this." Here is how you get along in a group like this." There is a kind of bridging through this list of characteristics. All these things are carried into the world of work, in the world of organizational involvement. These are also important on the job and in your organization. Then there is an exercise in which they do some rank of order for the characteristics in terms of their relative importance, etc. But the main purpose of this is to focus on these characteristics.

The second session is called a listening lab. This is an attempt to get people to begin to be self disclosing. There is an exercise with a listener, observer, talker, and so on. In addition, we try to demonstrate how important it is to listen and how common it is for people not to listen to each other even though it appears that they are doing that.

The exercise in the third session of this program is built on that of the previous session. Participants are asked to paraphrase the items they were told about other people in the group. An attempt is made to try to get at the whole process and help the group understand. To listen to a person behind the words, to listen to the feeling behind the ideas and attitudes.

In the fourth session we focused on self appraisal. Each of the group members relates himself to the ten characteristics that were initially presented and are encouraged to speak about those things that he needs the most improvement on.

The fifth session is designed to encourage a much more direct kind of feedback among group members with regard to who you are and how you are, now! You then get into the kind of interaction that begins to count as far as affording an individual the opportunity to see himself as others see him. The kind of emotional feedback that makes the difference in whether or not he is going to change if he decides to and wants to.

The next session involves another form of feedback in which we ask people to describe each other metaphorically. It is always interesting to me how well this works and how eloquent people are. Anybody, even people who are almost illiterate, find how eloquent they can be when they begin to describe other people in meticulous terms. These descriptions are frequently elements and factors that do not come out easily and that are much more difficult to deal with and express directly.

Then there is a discussion following these initial exercises. A discussion of what did that mean and how you feel about it. In other words the tape actually sets up a focus discussion after each of these activities. In the session following, participants are asked to describe themselves metaphorically. Here again, it happens to be a very different kind of expression than one usually gets and the individual has an opportunity to correct anything that he heard about himself that he feels is incorrect.

In the eighth session there is an exercise where individuals are encouraged to confront and deal with some of their stronger feelings about other group members. It sets up an opportunity for people to do what they want to do, but may need a certain amount of permission for; they are a kind of legitimating exercise. If a significant level of involvement has been achieved, people entertain pretty strong feelings about others. We find, at this point, that it is particularly valuable to be that free.

The ninth session the group member is focused on his strengths. It involves an exercise called strength bonbardment which some of you may be familiar with, in which, each person is given three minutes to talk about himself. The only rule is that he state positive qualities. It is intriguing how difficult it is for most people. It is a particularly valuable activity for looking at yourself positively.

The last session of this program involves a self reappraisal where the participants go back to discuss the ten characteristics.

3. The Black-White Tapes

I would like to describe the third program in the encounter tape series that is available September, 1969. It is an encounter tape program for Black-White groups. Our major goal in the design of this program is to provide group experiences in which black and white participants could have the opportunity to confront each other. Now, as with all the other programs, the same group meets together for a fixed period in a fixed number of sessions. In this instance, there are five sessions. It is essential to this kind of program that the group composition be no more than two thirds of one race.

Let me speak briefly about the contents of a session. The first session is what we call a micro-lab series of varied exercises within short timed periods. The purpose of this is to get involvement of the participants. The exercises we have in the session are designed to bring people into contact with each other in ways that are beyond the verbalizing games played in the initial session. In addition, the narrator relates the activity to the goal of the session. One of the problems involved in this kind of self-directed group program is to design activities to interest people, that involve and move them to issues that mean something. When you find techniques and activities to incorporate into a program that can do that you have to be careful you aren't coercing people into a place that will be inviting rather than informing that they will simply turn off the experience. The session is devoted to how deeply the participant wants to become involved. If we say in this session we are going to do such and such; as a group member I might think; "that sounds pretty risky, I am not sure I am ready for that, because I know what is going to happen I can ease out at a private level. I don't have to be punished by the group. I can govern the degree of involvement." Thus we try at the beginning of each of these sessions to establish the goal, the activity, and the relevance.

Then we have a session where we make it possible for participants to face each other to confront feelings that they have about each other and to establish the importance of focusing on here and now.

In another session we make legitimate the expression of negligent feeling, something that is very difficult to get people to do at a meaningful level. We have another session designed to attract low participators. Then we have a final session which is a kind of goodby activity. At the conclusion of these five sessions the group members are given a packet of take home materials to facilitate the transfer of what has happened to them in the group to their everyday life, to their own surroundings and situations, etc. As you see, there are a number of uses for these programs.

Apparently an important part of your conference is to become actively involved in a planning process which requires a sharing of information, etc., and my understanding is this is going to be done in small task groups. A selection of the sessions from the personal growth program are going to be used in the group. I believe the plan is to begin this afternoon with the first session and then go on with several other sessions with an option as to whether to go beyond that. I would like to open this session to questions about anything I have said, applications of any of the programs that I have discussed, concerns and objections to your own personal involvement in the kind of experiences that I have been talking about and anything else you would like to say to me.

A PILOT PROGRAM IN TEACHER EDUCATION

Russell L. French

One year ago a proposal for a Pilot Program in Teacher Education was presented to this faculty by the Committee on Experimentation and Innovation. The Pilot Program proposal grew out of interest on the part of the faculty and administration to design and implement a program which (1) reflects and enhances the maturity and capabilities of our students, (2) incorporates promising new approaches to teacher education, and (3) takes into account changes in the social and educational environment of public schools. The foregoing considerations are supported by the following assumptions we can make concerning our undergraduates:

Assumptions About Students

1. They have different personal and professional needs.
2. They wish to participate in planning personal and career goals.
3. They learn at different rates and in unique ways.
4. They are capable of being self-directed and self-propelling.
5. They are capable of learning somewhat independently.

The new program has embraced these assumptions as the essential marrow from which to generate new directions and procedures in the University of Tennessee College of Education.

The Pilot Program Committee also feels the necessity of restating the idea that the proposed new professional sequence for our College of Education is experimental and as such contains inherent problems and inconsistencies. Continual confrontation with such circumstances is the nature of a perpetual search for the attainment of the best education program for our students.

To succeed in developing such a program we need to constantly ask ourselves the following questions: "What is best for the student? What do we want this person to be like in four years, in fifteen years? Are we providing the kind of program that encourages individual development, self-discovery, and learning for its own sake or are we trying to maintain a paternalistic system, which inhibits the process of becoming a person?"

Presentation given by Dr. Russell L. French, Coordinator of Pilot Program in Teacher Education, The University of Tennessee, Knoxville.

Former Vice President for Academic Affairs, Dr. Herman Spivey, succinctly presented a challenge to the University in his farewell address to the faculty entitled Unfinished University Business:

> Students, faculty, administrative officers and all other members of the university community must learn how to interact with one another far more sensitively, sympathetically, responsively, maturely and democratically than we now do. The gap grows even smaller between the knowledge and understanding of the students as compared with that of the faculty, and the gap between the values and objectives of the two groups grows even wider. This makes all the greater and more urgent the challenge to establish student-faculty rapport, genuine partnership in learning. As you know, in the United States in particular, the college years have been structured and managed for the prolongation of adolescence. It is time now to wean ourselves away from that pattern and to develop attitudes and conduct more conducive to student fulfillment, realization of potential, each in his own individual way and at his own pace. We have long maintained verbally that college students are partners in learning, but until one o'clock on their commencement day we do not think of them or act toward them as full fledged citizens of the university community instead, more like children, too often like customers, sometimes like vassals. The parent-child relationship is precious; and one of the hardest things for any parent to learn is when and how to let go. Prolonged beyond eighteen, a close, directive and protective relationship, however benevolent, is suffocating and prevents self-discovery and maturation. Far more restrictive, however, is the king-subject, boss-worker attitude characteristic of some professor-student relationships. How shocking is the popular American college concept of the professor in his classroom as a king in his castle--incapable of error, immune to criticism!

Our College of Education has the potential in terms of personnel and educational resources to provide for the new relationships and directions Dr. Spivey challenges the University to seek and it has the opportunity to assume a leadership role in this task both within and without the University. The following Pilot Program progress report suggests ways in which a number of our faculty have collectively approached the problem of designing and developing a new professional sequence which we hope will withstand this challenge.

Implementation Plan

During this past year approximately forty faculty members have contributed to the further development of the Pilot Program. As a result of their efforts, five components[1] of the attached program flow chart are being implemented and experimented in this academic year.

Initially sixty freshmen will engage in relevant career oriented experiences this fall and winter via the Educational Environment and Career Choice course. As the accompanying model flow chart demonstrates, these freshmen will progress through the four year professional education sequence of the Pilot Program. The present program and the Pilot Program will exist side by side.

To arrange for course credit trade-offs between the current program and the Pilot Program, curricula modifications have to be made to accommodate the progression of the sixty experimental students through the Pilot Program (See Appendix

An additional experimental group of twenty-seven senior students will also begin progression through an experimental sequence of courses this fall, enabling our College immediately to evaluate these courses, both individually and as a year-long continium of experiences. The senior sequence will include Analysis of Teaching (fall), Microteaching (winter), and Simulation (approximately two weeks), which will be scheduled in conjunction with Student Teaching (spring).

Program Description

The projection of new and stronger faculty-student and faculty-faculty relationships is a hallmark of the Pilot Program. Students will be progressing through the program at independent rates and in small groups under faculty tutelage. Many faculty members will necessarily be coordinating efforts to provide a cohesive sequence for them. To illustrate, the proposed Human Learning Laboratory (Junior Year) will require the collective energies of methods people, content specialists, educational psychologists, and skilled supervisory personnel. The skills and knowledge of each will be needed to adapt subject area content and its inherent methodology to the levels of the Gagne learning model in the theory and planning stages, and then facilitate its application by our undergraduate pre-service teachers in a microteaching-like setting.

Alongside the title of each of the components described below is a list of our faculty members and faculty members from outside of the College of Education who have participated over the past year on the respective subcommittees and who were responsible for the development of a particular component.

Freshman Year Stage of the Pilot Program

This initial educational engagement phase of the Pilot Program is concerned with the need of incoming freshmen majoring in education to have the opportunity to investigate a career in teaching. Surveys here at the University of Tennessee College of Education and similar institutions across the nation demonstrate that many who earn bachelor degrees in education do not enter teaching. It can also be shown that many good undergraduate students in education reject this career preparation after freshman or sophomore years and enter other subject major fields. Dissatisfaction with the program experiences, failure of most programs to provide both early exposure and sufficient information relative to the teaching role, and the lack of information concerning the many career possibilities available in teaching are some primary reasons why many students and graduates elect these decisions. It is hoped that the first stage experiences incorporated in the Early Engagement Component can provide some solutions for these problems.

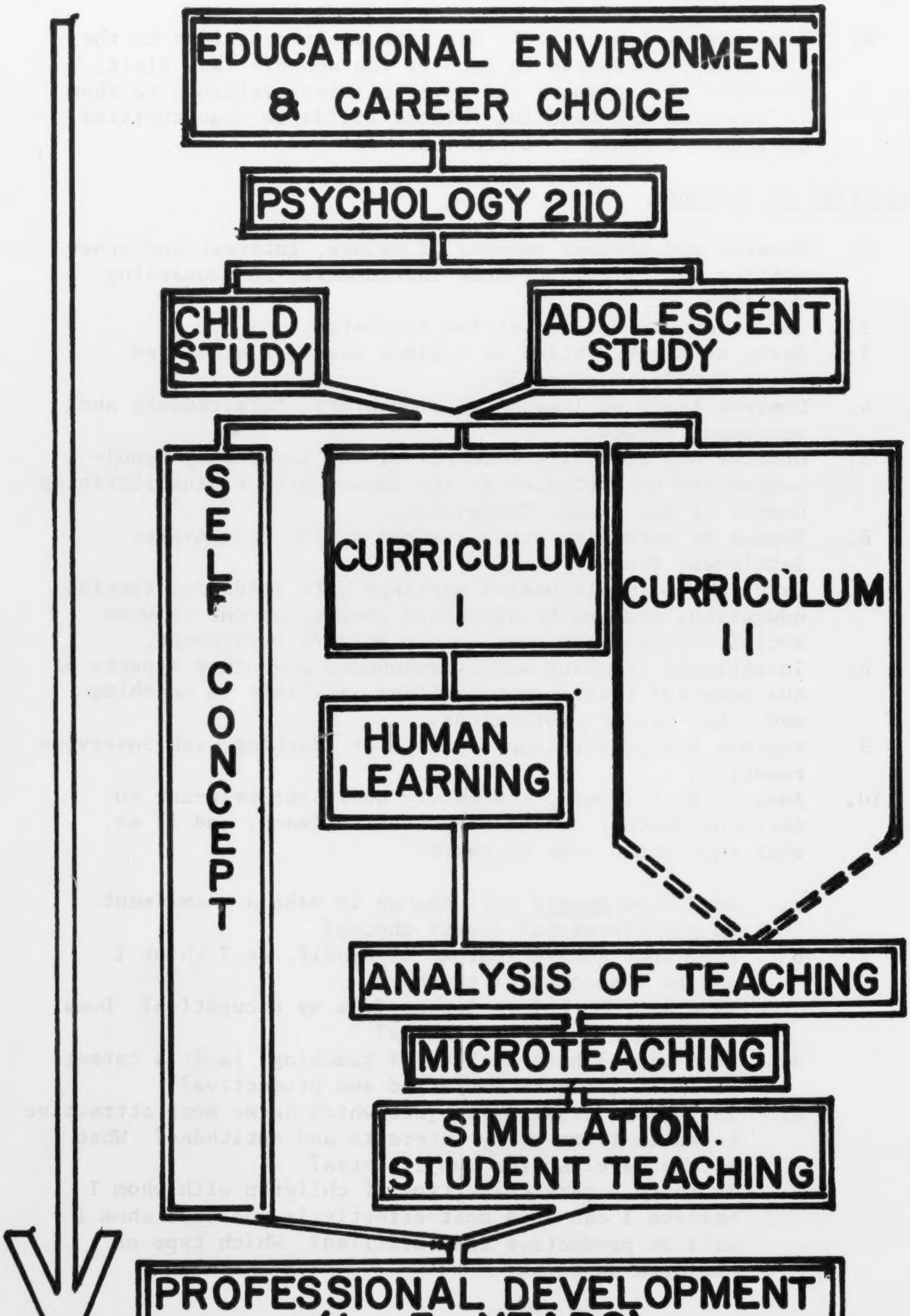
The Educational Environment Component

Dr. Aldmon (Chairman): Committee on Direct Experience (Dr. DeRidder, Education Psychology; Dr. Ramer, Curriculum and Instruction; Dr. Plotnicki, Health and Physical Education; Dr. Trusty, Educational Administration and Supervision). Dr. Butefish, Mr. Solomon.

This component will be introduced this fall as a three credit hour course entitled Educational Environment and Career Choice and will use a pass-withdraw grading system. Mr. Dietz from the Department of Educational Psychology and Mr. Blank from the Curriculum and Instruction Department will be managing this freshmen group in their progression through varied activities and experiences described below. Students will involve themselves in the course activities for individually varied lengths of time. The ultimate aim of this course is to help the student decide to make a commitment to teach or to withdraw from the College of Education program and to enable him to base this decision upon information and attitudes he can express. It is anticipated that this decision will be predicated upon the learning experiences they engage in while pursuing the following objectives and activities.

Objectives

1. Students will be able to state reasons for their commitment to teach.
2. Students will be able to describe orally and/or in writing how his personality factors, academic aptitudes and interests may relate to the future teaching roles of planner, mediator, and evaluator of pupil learning activities.


EDUCATIONAL ENVIRONMENT & CAREER CHOICE
PSYCHOLOGY 2110
CHILD STUDY
ADOLESCENT STUDY
SELF CONCEPT
CURRICULUM I
CURRICULUM II
HUMAN LEARNING
ANALYSIS OF TEACHING
MICROTEACHING
SIMULATION. STUDENT TEACHING
PROFESSIONAL DEVELOPMENT (1 - 3 YEARS)

3. Students will be able to describe special programs they have been exposed to for the physically handicapped, the emotionally disturbed, the mentally retarded and the academically gifted.
4. Students will be able to describe their reactions to the learning environment in each of the schools they visit.
5. Students will compare the opportunities available to them in teaching and teaching-related fields to opportunities available outside of education.

Activities of Students

1. Examine and discuss results of values, interest and other testing and rating oriented instruments, in counseling sessions.
2. Interview various in-service teachers.
3. Serve as teacher aides in limited sessions at varied grade levels if possible.
4. Observe teaching lessons at elementary, intermediate and secondary levels.
5. Observe and work with teachers of the physically handicapped and the retarded at the Daniel Arthur Rehabilitation Center in Oak Ridge, Tennessee.
6. Engage in work with group leaders at the Dale Avenue Settlement House.
7. Participate in discussion meetings with guidance, special education, and health education people and one or more social workers from Knox County Welfare Department.
8. Investigate teaching salary schedules and other aspects of the material reward opportunities available in teaching and other career professions.
9. Explore the professional aspects of teaching with inservice teachers.
10. Answer the following elementary questions relevant to deciding whether or not they want to teach, and if so, what they would like to teach.

    a. Do I know myself well enough to make a commitment to a professional career choice?
    b. From what I have learned of myself, do I think I can be a successful teacher?
    c. What are the things I want from my occupation? Does teaching offer those things?
    d. From what I have learned of teaching, is it a career in which I can be satisfied and productive?
    e. Is there a level or subject which seems most attractive to me in terms of my interests and aptitudes? What is the level and/or subject area?
    f. Is there a particular type of children with whom I believe I can work most effectively and with whom I will be productive and fulfilled? Which type of children is this?

Psychology 2110

At present, the general education psychology course (2110) will be the additional freshmen course prerequisite previous to this experimental group's sophomore year stage of the Pilot Program. This course has not been altered and remains as a requirement in General Education. However, Psychology 2120 will not be taken by this experimental group. (See Appendix A for the Psychology 2120 replacement).

Sophomore Year Stage of the Pilot Program

This stage, as presently envisioned, will encompass the experimental professional Pilot Program components to be experienced by this above group in their sophomore year. The model components included in this stage are presently defined as courses which after thorough experimentation with this group of sixty students, will give way to flexible scheduling as the total program development achieves a cohesive identity reflecting what has or has not proven worth retaining. The Study of Children or Study of Adolescence, the Study of Self, Curriculum I and Curriculum II will provide sophomore year professional experiences, although not necessarily in the order given.

It is projected that Self Study, on a limited basis, will extend over the sophomore, junior, and possibly into the senior year. Experimentation with this novel kind of activity will provide evidence with respect to its efficacy as a protracted two or three year experience. In like manner, the Curriculum I self-instructional modules and the Curriculum II methods courses, as explained below, will undoubtedly not be completed by most of the experimental group students within this one year. Most of the ten or twelve modules in Curriculum I and the methods courses in Curriculum II are scheduled for the Junior Year Stage of the program.

An explanation of the content, objectives, and activities of the above courses are given below.

Child Study Component

Dr. Thompson (Chairman): Department of Educational Psychology; Dr. Highberger, Child Development and Family Relations; Dr. Newton, Psychology Department; Dr. DeRidder, Department of Educational Psychology.

The content for this component includes a comprehensive child study core which is designed for students bringing all ranges of background knowledge to the teacher education program.

Subject matter areas included here are:

1. Child Study Techniques
2. Principles of Behavior
3. Intervention Techniques
4. Principles of Development
5. Developmental Levels or Stages (expectations of performance for different age levels)
6. Specific Topics of Child Development
7. Specific Categories of Children
8. The Child, His Family, and Their Development

Objectives

Students will:

1. Write anecdotal records.
2. Construct, administer, and interpret socio-economic devices.
3. Interpret cumulative record data (test scores, grades, etc.)
4. Demonstrate interviewing skills with children, parents, and teachers (e.g., questioning, leading, supporting, clarifying, etc.)
5. Demonstrate theoretical knowledge of social learning theory and adjustment mechanisms.
6. Demonstrate ability to use the environmental modification techniques in a classroom situation.
7. Demonstrate applied knowledge of principles of development.
8. Utilize techniques for identifying children with special needs.

To provide varied experiences and allow for individual differences among and within students, the Child Study Component will employ self-instructional materials, video taping units, films, laboratory experiences, simulation, and specific identified materials and equipment which will significantly contribute to a relevant Child Study Component in the experimental teacher education program.

Adolescent Study Component

(Department of Educational Psychology Subcommittee to be identified).

At present, the existing course entitled Adolescent Psychology will be scheduled for the experimental secondary education major until the Adolescent Study Component is ready for inclusion in the Pilot Program.

Self-Concept Component

Dr. McClain (Chairman): Department of Educational Psychology; Dr. Scott, Counseling Center; Dr. Trusty, Educational Administration and Supervision.

The theoretical background for the self-concept component of the program is contemporary phenomenology or self-theory. The major objectives for the teacher in training include basic understanding of how the self develops and understanding of their own selves in depth with focus on themselves as persons who are becoming teachers. Such knowledge should help prepare the subjects for effective teaching by increased understanding of human behavior in general and increased understanding of the means for facilitating growth. Furthermore, self-understanding in depth should prepare them better to use their unique selves in the teaching role.

Methods to be employed include: (1) the study of the literature of the self, both theoretical and research, (2) the study of themselves through group process, and (3) self-analysis under the supervision of a clinical psychologist by means of personality tests. These three procedures would proceed simultaneously, each one contributing to the other two. This facet of the program, as stated above, would begin in the sophomore year and may continue throughout the program. Meetings would average a minimum of one hour per week, sometimes in large groups and sometimes in small. Pre- and post-testing would assess progress in self-understanding.

Curriculum I Component

Dr. Burns (Chairman): Curriculum and Instructions; Dr. Maze, Business and Distributive Education; Dr. Robertson, Art and Music Education; Dr. Johnston, Curriculum and Instruction; Mr. LaForge, Library Service; Mr. Haefele, Bureau of Educational Research and Service.

Several distinct self-instruction oriented modules have been designated for completion this year and for inclusion in the sophomore phase of the Pilot Program. The subcommittee charged with defining and developing this component has engaged itself in identifying those basic or core elements which are common requisites to good teaching and professional development. A module is a format incorporating an instructional unit. Students may spend varying lengths of time working individually toward the achievement of the instructional objectives in the module. To label these modules as self-instruction oriented implies that they will be experimented with primarily in this mode, but that students will be afforded opportunities to interact with each other and with an instructor. This reflects the realization that probably no one vehicle will satisfy most of the students' needs.

As referred to earlier, most of these modules are scheduled for inclusion in the Junior Year Stage. The rate at which individual students move through them and meet the criterion levels of performance will be the only factors determining when any individual student will complete all of them.

The following is a list of the modules thus far recommended for inclusion in the Curriculum I Component (no sequence is implied):

1. Behavioral Objectives
2. Evaluation of Learning
3. Planning for Teaching
4. Organizing for Instruction
5. Curriculum Development and Evaluation
6. Ethical and Professional Behavior
7. Selection and Use of AV Equipment
8. Use of the Library
9. Research Literacy
10. Diagnosing of Learning Difficulties
11. Teaching the Disadvantaged
12. Philosophy of Education

The following outline is an example of one of the modules now under development which includes an excerpt from its proposed objectives, experiences, and activities.

The Behavioral Objective Module

1. Distinguish between behaviorally and non-behaviorally stated instructional objectives.
2. Convert non-behavioral objectives to a form specifying student post-instructional behavior.
3. Recognition of activities to include in a teaching sequence.
4. Skill in using modified versions of the Taxonomies of Educational Objectives.
5. To distinguish between performance standards used to differentiate achievement of students and those which aid the teacher in judging his own performance.
6. To construct performance standards for objectives in a number of subject fields.
7. Identify two forms of practice - equivalent and analogous practice - and to generate appropriate practice activities.
8. To identify four procedures for promoting perceived purpose.
9. Develop instructional activities incorporating each procedure.
10. To select and construct test items appropriate to given objectives.
11. To design both formal and informal pre-assessment procedures.
12. To make appropriate inferences regarding instruction based on data obtained from the students.

Work remains to be done in all of the above listed modules. The Pilot Program Committee is encouraging more faculty members to become involved in the development and completion of them. The list of modules is not inclusive. If you have thoughts on other units which could be included in the component and wish to engage in their design please contact Donald Haefele.

Curriculum II Component

(No committee designated)

Curriculum II currently incorporates those methods courses presently existing in the ongoing program. The Pilot Program Committee is encouraging faculty members teaching these courses to discuss what new concepts, media, procedures, formats, etc., might be incorporated in them where appropriate. The number of total credit hours required for this component, will range from three for Music Education majors, Physical Education majors, etc., to a total of thirty three for Elementary Education majors. (See Appendix A for further explanation of curricula modifications).

Junior Year Stage of the Pilot Program

This level of the Pilot Program encompasses the involvement of the experimental group of students in the Human Learning Component, in those phases of the Curriculum I and Curriculum II Components not yet completed by them and in the continuation of the Self-Concept Component experiences.

An illustration of the Human Learning Component presented earlier in this report expressed the need for involvement of a team approach. A typical team would be composed of methods people, content specialists, educational psychologists, and supervisory specialists who would provide cohesive and meaningful experiences for the students and relate theory and research to direct and relevant application.

Human Learning Component

Dr. Hawk (Chairman): Dr. Williams, and Mr. Edgerly, Department of Educational Psychology; Dr. Wahler, and Dr. Pollio, Department of Psychology.

The Human Learning Component is designed to provide pre-service teachers with an extensive in-depth study and knowledge of the application of basic learning principles. The component is built around the skeletal framework of Robert M. Gagne's hierachical learning module described in his book The Conditions of Learning.

Gagne has identified seven basic levels or types of learning according to the pre-conditions necessary for learning to occur on successive levels. Study at each level shall begin in the Human Learning Laboratory. Experiences in the laboratory will be under the direction of a human learning psychologist. These laboratory experiences will entail extensive observation and demonstrations of each type of learning. At the lower levels, both animal and human subjects will be used.

Subsequent to laboratory and supplementary reading experiences, students will attempt to implement the learning principles in simulated teaching situations, micro-teaching situations, and actual classroom settings. As students progress to more cognitive levels of learning, content specialist and spceiclists in educational methods will become increasingly involved in directing the students' experiences. At every level, students will be working under the direction of an interdisciplinary team. No formal classes will be held. Each student will be involved in individualized study, but responsible to a faculty member while gaining competence at each level of learning. The faculty members working with a student at each level will be responsible for evaluation of student competence and recommendation of advancement to the next level.

Senior Year Stage of the Pilot Program

As mentioned earlier, The Pilot Program Committee has randomly selected another experimental group of twenty seven students to participate in a potential senior sequence of the program this year, 1968-69. This sequence will consist of Analysis of Teaching (fall), Microteaching (winter), and the combined Simulation-Student Teaching component (spring). This limited one-year study will attempt to evaluate the effectiveness of these individual as well as the effects of the total sequence on the teaching behavior of the selected students in comparison with a matched control sample. Materials for the Simulation component are prepared for elementary majors only. Therefore, the secondary majors will not be exposed to the Simulation.

Analysis of Teaching Component

Dr. Howard (Chairman): Dr. Terwilliger, Dr. Thurman, and Mr. Blank, Curriculum and Instruction.

This component, as mentioned above, is being offered as a three credit hour course this fall for the senior experimental sample. Dr. French of the Curriculum and Instruction Department will conduct this course.

Background: The interaction analysis system developed by Ned Flanders, now at the University of Michigan, has been demonstrated as an effective research tool for categorizing and describing a teacher's verbal behavior. Research by Flanders in Minnesota, John Hough at Syracuse University, and others, has also shown that pre-service and in-service teacher training in the use of interaction analysis generally induces a consciousness in both groups of how their instructional behavior effects students in teaching situations. Such studies have also demonstrated that delibrate manipulation of verbal behavior on the teacher's part can stimulate commensurate alteration in the student's behavior. The literature implies that such training induces more indirect verbal behavior on the part of the teacher and this, in direct consequence, tends to increase student achievement.

Content: Students will receive training in interaction analysis and related non-verbal techniques.

Objectives: Students will:

1. Develop a sufficient cognitive knowledge of interaction analysis and non-verbal techniques.
2. Categorize, analyze, describe, and evaluate verbal teaching behavior.
3. Be able to demonstrate certain interaction analysis patterns and/or certain indirect/direct ratios.
4. Have subsequent knowledge of a tool for continuous post-graduate feedback on their teaching behavior and development.

Experience and Activities: Students will:

1. Learn the interaction analysis system and non-verbal skills via self-instructional materials and/or the instructor.
2. Practice category numbering and description.
3. Tally, develop and produce an analysis matrix.
4. Produce varied teaching patterns.
5. Utilize self-feedback media such as audio tape and video tape.
6. Evaluate their own verbal and non-verbal teaching behavior using interaction analysis and related systems.

Microteaching Component

Microteaching is being offered as a three credit hour course for the senior experimental group. Mr. Roeske from the Department of Curriculum and Instruction and Mr. Haefele from the Bureau of Educational Research and Service, will be managing this course.

Micro-teaching is scaled-down teaching in small groups (3-5 students usually) and class time (ordinarily 5 to 10 minutes). Pre-service students will practice a dozen or more teaching skills on school-age students in nearby schools. Micro-teaching is a logical subsequent extension of methods courses for those instructors wishing to involve their students in this "live" teaching skills development unit.

An investigation of its advantages discloses that Micro-teaching:

1. Simplifies the complexities of teaching by isolating specific aspects of teaching.
2. Provides more appropriate experiences for the beginner.
3. Permits greater control over practice.
4. Increases the amount of practice possible within a limited period of time.
5. Reduces facilities required for training.
6. Reduces the number of pupils required for training.
7. Provides good records of teaching performance at periodic intervals under standard conditions.
8. Permits several judges to evaluate and to re-evaluate a single performance.

Objectives

At the conclusion of the course, students will be expected to have developed some specific skills such as:

1. Establishing set
2. Establishing appropriate frames of reference
3. Achieving closure
4. Using questions effectively
5. Recognizing and obtaining attending behavior
6. Control of participation
7. Providing feedback
8. Employing rewards and punishments

Activities: When the trainee engages in a Microteaching lesson in his subject, he will focus upon a specific aspect of teaching, such as one of the above skills, until he has developed a satisfactory minimum level of the skill before he proceeds to another skill. If he does not master the skill in the first lesson, he views his performance on video tape, receives a critique of it, engages in training and tries again, until he is successful.

Simulation Component

Dr. Cruickshank: Bureau of Educational Research and Service

As explained earlier, elementary education students in this Senior Year Stage will spend approximately the first two weeks of their Student Teaching Unit working with Simulation materials. Realistically speaking, the time required to do an adequate treatment of the Simulation component is much more than is allotted here. Therefore, these seniors will not become extensively involved with all of the materials.

The simulation component re-creates the classrooms of Pat Taylor, a new fifth-grade teacher at Longacre Elementary School. Initially, each student assuming the role of Pat Taylor is oriented to the community and school by the superintendent and the building principal. After receiving professional resource materials (cumulative record cards for the class, a curriculum guide, a faculty handbook, and so forth), Pat is engaged in solving 31 teaching problems most commonly reported by first year teachers. The simulation component created by a university staff member, is intended primarily for elementary education majors. Additional materials will be prepared for prospective teachers of the disadvantaged and junior-senior high teachers.

Objectives

1. As a result of the simulation experience, students will have gone through a simulated orientation to a position as an elementary teacher. They will learn about a school community and a school. In addition, they will be made aware of and learn to use professional materials.
2. Students will be able to solve problems such as: dealing with disruptive student behavior, getting students to do homework, handling children's aggressive behavior toward one another, locating instructional materials, etc.

Student Teaching Component

The Student Teaching Subcommittee is prepared to incorporate several innovative features in this Pilot Program component. A Pass-Fail grading system will be adopted. Student performances will be self-evaluative for the most part, utilizing each student's ability to construct an Interaction Analysis profile on himself to analyze his verbal behavior. Pre-and post- measures, which have previously been proven valid measures will indicate student flexibility scales and reflect the pre-service teacher's amenability to behavior change through the student teaching and microteaching stages.

Future plans include the instituting of an internship program permitting the more competent students to work half-time for half the pay of a regular first year teacher. Seminars, tutorials, and independent study activities will comprise the remaining half-time of the interns.

In summary, the experimental senior sequence to be investigated this year involves the sequence: Analysis of Teaching, Microteaching, and Simulation-Student Teaching. To reiterate, this is a tentative experimental sequence which is amenable to immediate application, and which possesses components judged by the Pilot Program Committee to have direct relevance to the production of effective and sensitive teachers. The particular sequence may be irrelevant and so may be the concern as to whether or not some of these experiences occur in the senior year. Further study will no doubt provide evidence relative to these issues.

Continuing Education in Teaching Stage

Professional Development Component

Dr. Mayshark (Chairman): Dr. Kirk, Health, Physical Education, and Recreation; Dr. Hughes, Educational Administration and Supervision.

The objectives of this component focus upon the achievement of continuing professional development of our graduates in education. Supporting resources from the College of Education, including faculty personnel, will be available to first, second, or third year teachers, to enhance their performance and growth as teachers in these early years when it is needed most.

Another concern of this component will be the vehicle it offers as a means of supplying follow-up data on our graduates. Accumulated information from systematic investigation of the strengths and weaknesses of these beginning teachers will be studied for purposes of identifying in what areas we are doing a good job and where we may be in need of improvement. This component reflects a philosophy concerning the need for a continuing assessment and evaluation of our teacher education program and for a continuing dialogue and involvement with graduating teachers to facilitate their further professional development.

The Evaluation of the Pilot Program

The over-all evaluation design of the Pilot Program has been developed by Dr. Kennedy from the Bureau of Educational Research and Service. Twelve major sources of experimental invalidity have been minimized or controlled as much as possible through (1) the utilization of a completely random sampling plan, (2) the utilization of control groups, and (3) the adoption of Random Four - Group Design. Mr. Dietz and Mr. Blank will apply the initial steps of the design in their pre-testing of the freshmen experimental group this fall.

If you are further interested in the intricacies of the experimental design, a copy of the document explaining it more fully can be obtained from Mr. Haefele.

THE "VAULT" PROGRAM

Joseph Kelley

Veterans Accelerated Urban Learning for Teaching appears to be one of the answers to fill the infinite void of role identification among returning veterans who would be amenable to returning to school and becoming teachers; to build for the future not to destroy the present.

For the first time in the history of education, it seems as though someone with authority has recognized the fears attending all returning servicemen and is sincerely attempting to shape and prosper their course.

Since 1968, V.A.U.L.T. has demonstrated that returning veterans with a history of disadvantaged, impoverished backgrounds, with weak academic records, and some without a high school diploma, are meeting current social needs, and further serving their country, as teachers of inner city bastions.

The entire program's curriculum has barred the teaching of simply mechanical courses to compensate for cultural or educational deficiencies in the students. Rather, "hooker courses," concentrating on issues of interest to the men and relevance to current social conflicts, have been emphasized.

The program is designed to interest and train the participants to become teachers in ghetto schools. Through arrangements with the St. Louis Public School System, which has demonstrated a progressive and cooperative interest, the veterans are serving as observers and practice teachers for the following year. Meanwhile, Webster is giving academic credit for the teaching experience.

Webster's effort in Project V.A.U.L.T. is one example of how a program can contribute both to the education of disadvantaged veterans and to meeting of current social needs.

Project V.A.U.L.T. (Veterans Accelerated Urban Learning for Teaching) began at Webster College in the spring of 1968. Initial financial support for the program was provided by a grant of $25,000 from the Danforth Foundation of St. Louis. The objective

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Presentation given by Dr. Joseph Kelley, Vice President, Webster College, Webster Groves, Missouri.

of V.A.U.L.T. is to meet two fundamental needs of our society: first, the desperate need to provide for more qualified teachers (especially male) in our inner city schools and to create an entry level into a profession for individuals from disadvantaged backgrounds. It is designed to attract veterans both black and white and prepare them for teaching in an accelerated three-year period. The concept emphasizes courses highly relevant to social and minority group problems to stimulate interest in formal education, "action learning" which would immediately place students in field situations supportive of classroom work, and a tangible, professional goal at the end of a relatively short period of preparatory time.

Currently V.A.U.L.T. students are interning in the St. Louis public schools and suburban Kirkwood schools. St. Louis assignments are in ten Banneker District elementary schools while Kirkwood students serve as teacher assistants on all three levels--elementary, junior high, and high school.

Field assignments were made in agencies which play a major role in the daily lives of inner city families and their children, e.g., St. Louis Housing Authority, Welfare Department, juvenile court and possibly the police department. If one intends to teach within the city, actual working experience with one or all of these agencies would be invaluable during the preparatory period.

While the development of the program from its summer opening through the relocation of students from base to campus has not been without its problems, results to date have confirmed the assumption upon which the original concept was founded. In addition, the major potential problem, that of student attrition, has been less a factor than originally anticipated. For example,

60%, or 25, remaining in the program after first year,
Veterans were from throughout the nation with at least
  50% coming from the St. Louis area.
Three of the V.A.U.L.T. veterans are top math students
  at the college,
One is a top chemistry student,
One is quite adept at film making and audio-visual aids
  as teaching devices.
Several are succeeding exceptionally well given their
  poor educational background.

Not only does V.A.U.L.T. serve the veterans, but it confronts a wide range of deficiencies in higher education related to the problems of the disadvantaged student. These problems include:

1. The disadvantaged student who possesses basic ability for success in college but who cannot meet normal admissions requirements.

2. The disadvantaged student who has the ability but not the aptitude for college.

3. The critical need in elementary and secondary ghetto schools for teachers representing minority groups.

4. The need for male teachers in ghetto schools to help fill the "father-figure" gap so common to ghetto children.

5. The need for well-educated leadership for minority societies.

There is no other program in the nation quite like it for providing the veteran an opportunity to earn a Bachelor of Arts degree in less than four years and a possible M.A.T. (Master of arts in Teaching) at the end of another year and a half.

It is comonly recognized that the transition period from the military to civilian life is not always an easy one, especially for those veterans who have been engaged in hostile combat in hostile environs. But surely it must be more difficult to find a painless level of entry into the academic world as a student for those veterans whose previous school experiences were anything but pleasant, and particularly for those of disadvantaged backgrounds, members of minority groups--or both, who entered military service before or upon high school graduation.

His educational background to that point is deficient, his professional aspirations are negligible and his chances for formal training in the service are slim in the face of high combat priorities. While in the service he enjoys a fair amount of tolerance. If he is black he may enjoy a fair amount of racial tolerance, some prestige as a fighting man, and somehow begins to share the conviction that "things will be different" when he leaves the military to re-enter civilian life.

It is clear, however, that once again, society has created false expectancies for him. He is too often academically unacceptable to colleges and universities and unemployable in any long-range career sense. As a result, he is often feared for the militancy he develops in response to his letdown.

Obviously, any attempt to typify a situation which involves thousands of individuals falls short of adequacy. On the other hand, that the situation just generalized exists today at a crisis level is undeniable.

In the area of academic and personal counseling the need may vary well be the greatest. Full time personnel are needed to spend many hours in close personal consultation with veterans to encourage them when they have doubts concerning their ability to successfully negotiate a college course of study. Sometimes a single low mark can be destructive--serving to reinforce old beliefs of inferiority and low achievement, but with proper guidance and sensitive counseling the impact of poor performance need not be so traumatic.

In conjunction with the obvious need for academic counseling is the ever present need for trained personnel to offer remedial and tutorial services to the veteran with academic deficiencies. Too often during the past year we were unable to provide adequate tutorial and remedial assistance to our students. For example, we have some students who possess great ability and desire, but lack the requisite skills to put their ideas on paper employing the correct grammatical usage and structure. The same is true in the area of collecting and organizing data and material for term papers and reports. This is particularly painful to observe when it is a student(s) who makes only a few mistakes and you are certain his difficulty could be corrected with a few tutorial sessions. Sessions which, unfortunately, we are unable to provide.

The importance of personal counseling cannot be over emphasized. Veterans of disadvantaged backgrounds generally require special counseling as their problems quite frequently originate of a different nature than other students. For many it is difficult to make the budgetary adjustment in their lives especially when they are in daily contact with younger students who may have more money. If the veteran is married his wife may not see the advantage in postponing rewards until later and she may pressure him, against his will, to leave school and "get a job."

There have been situations of this nature and it was learned that if the wives are given counsel along with the veterans an amenable situation can sometimes be achieved. Additionally, students with great ability have been lost simply because they could not be given the day to day encouragement and personal attention needed, simply because there was not adequate resources to hire the personnel.

Case after case could be cited in support of the need to create special programs for veterans at institutions of higher learning. However, it should be pointed out that it is mandatory not to establish large remedial programs within colleges which too often become separate entities identified as projects for slow learners and, in fact, become almost a separate college within a college carrying a stigma which is synonymous to low achievement and slow learning. Some institutions of higher learning hold students needing remediation virtual prisoners in special programs failing to create an academic level of entry into the regular college.

Project V.A.U.L.T. has prevented this by availing pertinent courses to the veterans during the second semester with instructors who are sensitive to their specific needs.

In order to implement project V.A.U.L.T. a new cooperative relationship was established between Webster College and St. Louis University. Webster College will administer the program during the developmental phase. The relationship involves a liason between St. Louis University and Webster College at three major junctures in the program's evolution:

Staff
The Staff for project VAULT would be drawn from both institutions on a loan and partial contract basis. Total remuneration for faculty and staff will accrue from program revenues (tuition, grants, etc.).

Elective Courses
The twelve hours of elective courses in the program would be taken in the regular undergraduate programs of both Webster College and St. Louis University.

The Masters Degree
The last year and a half of the program which involves the optional study for a Masters Degree would be handled by the existing masters degree programs at both institutions, the MAT at Webster College, and the Masters of Education and Masters of Arts in Urban Affairs at St. Louis University.

The director of the V.A.U.L.T. program from Webster College represents Webster in the cooperative relationship and the director of the Center for Urban Programs represents St. Louis University. This program has already received the support of the School Administration of the City of St. Louis, Missouri.

COURSE SCHEDULE

First Year

Summer Session

Date: June 3, 1968 - August 10, 1968

Conflict Analysis Seminar	4 credits
America: Black and White	4 credits
Reading and Writing Seminar	2 credits

Fall Semester

Date: September - December, 1968

Humanities Seminar	4 credits
Math - Science Seminar	4 credits
Reading and Writing Seminar	2 credits
Action Learning	7 credits

Spring Semester

Date: January - May, 1968

Math - Science Seminar	6 credits
Reading and Writing Seminar	4 credits
Elective Courses	7 credits

Total Credits: 44 credits

COURSE SCHEDULE

Second Year

Intersession

Date: May 15, 1969 - June 30, 1969

Humanities Seminar	5 credits
Math - Science Seminar	5 credits

Summer Session

Date: July 1, 1969 - August 15, 1969

Action Learning	8 credits

Fall Semester

Date: September - December, 1969

Humanities Seminar	5 credits
Math - Science Seminar	6 credits
Elective courses	6 credits

Spring Semester

Date: January - May, 1970

Humanities Seminar	6 credits
Action Learning	10 credits

Total Credits: 95 credits

COURSE SCHEDULE

Third Year

Intersession

Date: May 15, 1970 - June 30, 1970

Teaching of Humanities Seminar	6 credits
Psychology of Learning	4 credits

Summer Session

Date: July 1, 1970 - August 15, 1970

Action Learning	8 credits

Fall Semester

Date: September - December 1970

Teaching Internship	5 credits
Methods of Teaching	4 credits

Spring Semester

Date: January - May, 1971

Teaching Internship	
Issues of American Education	3 credits

Total Credits: 125 credits

Fourth Year

Teaching

Course Descriptions

Conflict Analysis Seminar

Seminar in Conflict Analysis will provide students training in identification of role behavior as seen in social conflict situations. Initially the course will emphasize auditory and perceptual analysis skill and progress into greater dependence on reading and writing analytical abilities.

Recognizing that students possess a high level of physical energy the course will stress physical action and "doing" upon the part of the participants. Secondly, the course will strive to enable students to achieve success in handling materials that require critical thinking. Reading and writing materials will be introduced into the course based upon students interests, with the objective of eventually enabaling students to transcend their immediate world view and perceive those of other people.

For example students will be shown a motion picture. Class discussion on the film will follow to identify role behavior and the "why" of role behavior. Students will then be assigned to write a short play-situation in which the role behavior of characters in the motion picture would be re-created. We would video-tape the student presentation with the class being shown the tape and the class analysis following. Also, selected passages from literary works that exemplify role behaviors under study in the classroom would be examined. Class discussion of the reading would follow.

America: Black and White

Intended as an aid in reorientation to the urban scene in America, this course will begin with study of contemporary black-white relationships and then delve into the social history behind the current crisis. The course will include study of the socio-economic relationships between blacks and whites, critical analysis of the various approaches to the situation including the black power and civil rights groups from militant to moderate, the public and private programs, and the political relationships in the society.

The background investigation will focus on the socio-economic history of the Negro community in America, from African antecedents to the present moment.

The aim of the course is to provide access to sources and to arm the returning G.I. with critical and analytic tools with which to evaluate the programs, ideologies, and approaches of various groups to America's number one domestic problem. Thus, he will be better able to make his own decision about his role and style of service in urban America.

Humanities Seminars

Seminars in the Humanities will be organized around a thematic approach to the study of civilization. An interdisciplinary method of instruction will provide students opportunities to sift major trends and identify crucial concepts from the mass of factual information. Within the framework of the seminars will be discussions, presentation of short papers, creation of films and videotapes, and writing of poetry and short stories.

The four major Humanities seminars will examine American, European, Asian, and African civilizations through the medium of history, social science, literature, and the arts. Although stress will be laid upon the development of reading and writing skills, students will be encouraged to respond to the intellectual demands of the seminars through discussions, creation of film and videotapes.

To train students in the lecture method of instruction, they will observe two hours of filmed lecture in the company of tutors. Note taking and analysis of the lecture will be stressed in these sessions. The actual filmed lectures will be made by participants in the Humanities seminars and will be linked to work under study in the seminar.

As students achieve skill in analyzing lectures they will be given opportunities to take a "mini-course." This will be entirely on film. These courses will utilize programmed examination materials enabling students to progress according to ability and interest. Upon successful completion of the twelve hour course, a student will be eligible to obtain one credit hour.

Math-Science Seminar

To emphasize the inter-relationship between mathematics and science students will encounter both equally in a jointly taught math-science seminar. The first math-science seminar will point out the harmony between science and mathematics while the second seminar will emphasize the differences in structures of the two areas. The third course will provide content and techniques in the biological science areas and will show the relationship between science and the social sciences. The fourth course, in the math-science sequence, will emphasize content in mathematics and point out some interactions between mathematics and art, science, philosophy and religion.

Material will be intorduced into the initial math-science seminar in such a way that students will be able to utilize the information and teach elementary children through extensive use of manipulative materials. Specific consideration will be given to examining several short units so that students, as part of their class work, can be prepared to teach one such unit to a group of inner-city elementary school children. Thus early in his college experience the student can achieve success in teaching children in elementary school.

Action Learning

Learning in the context of a real situation combines practice and theory in an unusually effective way. The credits in Action Learning will be earned by field experience related to discussion of appropriate theoretical materials. Tutoring, school-community work, community organization, city agency service; all these offer possibilities of learning in the social sciences. Tutoring and school-work offer experiences in the socio-economic world of the child and provide insights into the relationship of the child, his family, and their world to the school as an institution. Street work and agency service provide a realistic context for theoretical inquiry, into sociology, political science, and the economics of poverty.

Action Learning will involve field placement with joint supervision by the agency and by the college, along with a weekly seminar which ties theory to experience. The progression of placements and seminar content will be guided in such a way as to build knowledge in the disciplines as well as to aid students in the development of more sophisticated professional skills.

While this program embodies Webster's basic commitment to experiential learning, at the same time it provides additional manpower for service in urban ghettoes in a critical moment.

Teacher Training Program

Teacher training for the urban world will necessitate involvement in a wide variety of teaching-learning situations preceeding the actual two year internship in the St. Louis public school system. Students will immediately be involved in teaching. They will tudor Upward Bound students; learn to teach units in the Metropolitan Educational center in the Arts; gain experience in pre-school programs; and work as teacher aides. Students will be able to draw upon their own skills and education, particularly their experiences in the armed forces, to aid them in achieving a positive self-image of capability and success.

An important aspect of the teacher training program is to create teachers who visualize their role as curriculum developers and modifiers as well as classroom teachers. While in college classes students will be able to develop short pieces of curriculum in lieu of other forms of response to material learned.

During the second summer session at college, students will take a Psychology of Learning course that focuses on learning within the inner-city environment. Extensive use of video-tapes, films, and classroom observations will be linked to the course.

The fall semester of the third year will initiate a two year internship in a St. Louis public school. Experienced inner-city teachers and project staff members will constitute the personnel conducting the methods seminar that runs concurrently with teaching. Students will be under the supervision of project staff members while performing their internship in the city schools. The methods seminar will be conducted weekly during the first year and monthly during the second year of teaching in the St. Louis schools.

During the spring of 1971 the Methods Seminar will focus upon issues of American Education. This course will analyze current broad patterns of educational development and through use of a phone hook-up enable students to come into contact and dialogue with prominent American educators throughout the nation.

In addition to supervision of the teaching experience frequent workshops will be offered during the two year period. These workshops will emphasize critical aspects of elementary school teaching.

Students will be encouraged to enter the Webster College M.A.T. program or a Masters program in St. Louis University in order to further their knowledge of particular subject area disciplines. These Masters programs will furnish additional subject matter knowledge as well as emphasize methods of teaching.

Missouri Elementary Certificate Requirements
and the
V.A.U.L.T. Program

State Requirements	Hours	V.A.U.L.T. Program	Hours
Language Arts			
Composition, Rehtoric & Grammar	5	Reading & Writing Seminars	4
Children's Literature	2	Independent Study Writing Seminar	4
Elective English or Speech	5	Teaching Humanities (2 hours Children's Literature)	2
		Humanities Seminars	7
		Electives	6
Social Studies			
American History	5	Humanities Seminar in American Civilization	5
U. S. or State Government	2	Action Learning	8
Geography	2	Humanities Seminars in Asia, Africa, & Europe	7
		Seminar in Conflict	4
		America: Black & White	4
Art and Music			
Art for Elementary Grades	2	Teaching of Humanities Seminar (Art & Music)	4
Music for Elementary Grades	2	Elective	2
Elective Art and/or Music	2		
Health and Physical Education			
Health or Hygiene	2	Action Learning (Work on Playgrounds)	4
Physical Education for Elementary Grades	2		

Missouri Elementary Certificate Requirements (Cont'd)

State Requirements	Hours	V.A.U.L.T. Program	Hours
Education			
The Pupil (Educational Psychology, Child Psychology, Child Growth & Development, etc...)	4-5	Psychology of Learning Issues of American Education	4 2
The School (History or Philosophy)	2-3	The School (Part of Action Learning)	4
Methods (Including Teaching of Reading or Language Arts)	4-5	Methods	4
Student Teaching	5	Student Teaching	5
Science			
Biological & Physical or Earth Science (to include laboratory or field work in at least one science area)	12	Math-Science Seminars Science Seminar	6 6
Mathematics			
Math for Elementary Grades	2	Math-Science Seminar	3
Elective Mathematics Credit	5	Math Seminar	4

THE CHALLENGES OF POST HIGH SCHOOL EDUCATION

James Wattenbarger

Among the many problems facing education at the post high school level there are a number of challenges. I would like to discuss 12 of these with you today. These are in twelve specific areas where you will want to give attention when you examine post high school education in the 1970's.

The first of these is the challenge of universality. We are approaching a time when there will be universal opportunity for post high school education. This fact is no longer in the realm of future dreams but it is a reality in several states at the present time. At the beginning of the 19th century we were placing emphasis in this country upon the development of universality of elementary education and it was during the early 1800's that this dream became a generally accepted goal. The percentages of the age group between 6 and 12 years of age who attended school increased from 10 percent up to 65 percent, then 75 percent and 85 percent until it reached the 90-95 percent level. Now the percentages of the children between 6 and 12 who attend school is almost universal in all parts of the nation.

In the early 1900's we began to develop universality of opportunity in secondary education. You will remember the great statements of goals which were made in 1917 and 1918. The implementation of these goals during the 1920's and 1930's has experienced rapid development until at the present time almost everyone of the age group--12 to 18--are involved in secondary education.

Now the post secondary level, the level at which we are particularly concerned at this Seminar, is approaching the same universality of educational opportunity. We will soon be providing opportunity for continued education for everyone who has passed the age for attending high school. The real challenge, however, in this post high school universality is "Can we do this in such a way that each individual receives the kind of education he needs? Can we do this in terms of the diversity of education that is needed at this post high school level? Will we continue some of the poor practices that we have already built into our educational system or will we use the knowledge we have to do a better job? Will we reassess our practices and our purposes?"

Presentation given by Dr. James L. Wattenbarger, Director , Institute of Higher Educationa, College of Education, University of Florida, Gainesville, Florida.

The second challenge that I would like to point out is the reexamination of the purposes and functions of education. Are we truly concerned about the development of the talents of each individual with whom we work? Or do we want to force everyone into a common mold? Make them all alike? Post high school education has in many instances become a molding process. Even so much so that popular song writers have pointed it up. You may remember a song in vogue a few years ago which described the typical middle class family who sent their sons off to college where they were packed in little picky-packy boxes all tied up with blue and yellow ribbons. These young men all came out of college looking just alike so that they could send their sons to the same colleges where they would come out in little picky-packy boxes tied with blue and yellow ribbons.

This is what happens in many of our collegiate institutions. Young men (and women) are divested of their individuality and packed up in the same little boxes. Now with the challenge of universality for post high school education, we must face up to the additional challenge of assessing the purposes of continued education. You know better than most people that when you put something into a mold that doesn't quite fit, you discard it and begin again. You will always find an ash can where you throw those things which are not quite right. So the only ones who come out are those which fit the mold perfectly. That thought has some real interesting "1984" implications, doesn't it?

A second question relating to the purposes of post high school education might be: "Are we actually going to prepare people to live in the society in which we are existing at the present time?" Society in the 1960's and 1970's has become even more complicated than that of the 1940's and the 1950's. Our environmental problems constitute only one area of emphasis. The complications of society resulting from increasing pollution is one example. If we educate people who continue to pollute the environment more and more, then our educational system will suffer along with the environment. A third area that I would select (particularly because of the emphasis of this Seminar) is the area of occupational education. How can it be done with emphasis only at the post high school level? When are we going to begin to consider occupational education as a part of a total educational process which begins with pre-school and kindergarten and carries on through the elementary grades and secondary grades? Vocational education cannot be a decision people are forced to make when they reach the post secondary level. Everyone, literally everyone, must prepare for some occupation, some service or some profession. However, we seem to ignore this until it is almost time to "go to work." Our traditional attitude of ignoring vocational education causes serious delay in education development for many youth.

A third challenge that I would propose for your consideration would be the challenge that is posed by the needs of our society: a society which can within less than ten years conquer the outer spaces and put a man walking on the moon; a society which is heavily emphasizing technical education, heavily emphasizing the development of science and industry, where the unemployment rates become very small in relationship to the total work population. When you try to employ a secretary, you learn to define the problem. If you have tried to employ people for leadership positions you know what the problem is. I have really been amazed recently to see the kinds of opportunities the young people who have completed their doctor's degrees at our institutions have been receiving. Positions which are not only interesting and challenging but are also really very well fitted to the preparation these young people have received. These positions also pay very respectable salaries. The demand and the opportunity for well prepared man power seems almost unlimited.

We are in a time when people who have technical skills will have no difficulty finding employment. The challenge is developing people who can accept and carry on the highly technical jobs. We need in our society citizens who participate and who contribute to the development of society. We need voters who understand the problems well enough to reach competent decisions about them.

We need to look at society's occupational structure in terms of the kinds of occupations which we may expect to develop in the future as well as those in existence at the present time. There was an ad in the Washington Post, placed by General Electric about a year ago, which was captioned: "A year from now you will look back on these job specifications and laugh." The ad then listed such jobs as circuit design programmer, mechanical engineer, spectrosity technician and other very unusual job titles with terminologies which most people do not know. The challenge of our changing occupational definitions is a challenge which is thrown directly in front on those who prepare people to work. The challenge is centered in preparing people who have different kinds of ability not necessarily different levels of ability. There was a short treatise written back in the 1700's called "The Fable of the Bees," in which the author pointed out that in the bee hive there were drones and there were certain other bees which perform certain kinds of work. Other bees were assigned the job of protecting the queen, and finally there is the queen herself. These differentiated functions implied a ranking level of jobs reflecting the different abilities of a bee hive and bees are "born" that way. For many years this was also the basis which was used in helping people select their occupations and their education. In other words, we think we are bees and were born for certain jobs. The fable of the bees has been applied to our work structure and our educational systems. However, we are not bees and the structure of the bee hive is not appropriate for human development. We must talk about kinds of ability, rather than levels of ability. I am sure you are familiar with the famous quotation of John Gardner, former Secretary of Health, Education and Welfare, who was pointing out the need for good plumbers and good philosophers. He stressed the fact that if we don't have good plumbers as well as good philosophers, neither our pipes nor our philosophies will hold water.

The fourth challenge that I would mention would be the challenge of student recruitment. A part of our difficulty in preparing good faculty members to teach at the post high school level is caused by the fact that there is not adequate understanding of the process of guidance and counselling. In recruiting students for the various occupational areas, we often encounter, attitudes which are really opposed to occupational education. The parental attitudes, the attitudes of high school counselors who sometimes measure success in counselling by the number of students for whom they are able to obtain admission to Ivy Colleges. The counselors are doing this in great measure because many parents have the same attitudes. An article in a news paper recently quoted a parent who was a very successful plumber with a great plumbing business and with an estimated annual income of $15,000. He apparently made a statement that he wasn't going to permit any of his three sons to go into plumbing. He wanted them all to get four year baccalaureate degrees. This parent's attitude does not permit or encourage the youth to make a choice for themselves.

A third problem related to student recruitment is associated with inadequate preparation for continued education. Our procedures often encourage students to continue on and on even with an inadequate preparation. Students sometime arrive in the seventh grade reading at the second grade level and no one does anything about it. By the time these students reach the twelfth grade they are still reading at a third grade level because no one gave any attention to the fact that they could not read. Often the most important vocational subject in the whole educational program is reading.

Fourthly, the challenge of student recruitment is based upon a concern relative to the attitudes of faculty members in elementary, high school and post high school institutions as well. Attitudes which make it difficult if not impossible to help students make proper choices because the emphasis is placed upon the wrong kinds of education and needs to be changed.

Another part of this challenge is centered around the scholarship program which helps people continue their education. How many scholarships are made available to help people enter occupations other than medicine and law and the professions? How many companies provide scholarships to encourage people to go into the other kinds of occupations?

Ford Motor Company provides one instance which makes scholarships for automotive technology available to families of people who work for the Ford Motor Company. This should be encouraged. The challenge of student recruitment is very much involved in the attitudes of parents, the attitudes of counselors, the attitudes of the faculty, the inadequate preparation some students have received and finally the attitudes of the general public as are evidenced through scholarships and similar examples of support.

A fifth challenge that I want to emphasize is the challenge of teaching. We have seen over the years some interesting philosophies related to the teacher's job. One of these has been expressed as "educate the best and shoot the rest." While we seldom shoot our students with bullets, we often do shoot them with caustic comments and other ways which make it quite clear that some students are not quite acceptable people. The content of our courses have not been adjusted to keep up with societal changes and the need for the interdisciplinary problem approaches become unanswered pleas. There is an obvious need for change in the practice of teaching. What are you going to do about this need for change?

Renewed attention to the whole field of curriculum planning is an essential. In the development of our varied courses we plan too much in isolation. Each little unit in the college or school plans all by itself. When these isolated units conflict with each other, there is little apparent concern. This is particularly evident in most large universities where the various colleges and professional schools develop their own course in isolation from the others. This fact affects few students since most will complete their entire program of studies in one college. If a student makes a change, however, he encounters real difficulty. Typically and unfortunately the community junior colleges as well as other institutions at the post high school level emulate the university. They seem to pick up poor procedures as well as the good ones. The isolation of specific programs and the absence of interdisciplinary planning cause as many problems for students in the community junior colleges as in other institutions. The problem is particularly unfortunate in these institutions because the basic philosophy should be to keep the program open ended so no student reaches a "dead end" in his education. The "sell" approach to curriculum tends to close doors for the most part.

The seventh challenge I would mention is the challenge of numbers. You have heard upon occasions someone decrying the fact that we have attempted to develop so called mass education. Mass education or if you prefer the term, the education of the masses is a basic policy in the United States. We are involved in educating everyone; we are not involved in educating a selected few. The challenge of numbers involves providing opportunities for every person. I noted in a recent newspaper article that if the world were to be considered a unit of 1000 that 60 of these people be citizens of the United States. These 60 people would own half the wealth of the world. This means that every human resource in this country must be used to his fullest extent if we maintain our preeminence. The education of the masses, therefore, is a necessity for our survival.

As most of you know there are in the United States at the present time about one thousand community junior colleges. These are serving about two million people. By 1975 we should have community colleges available to serve almost four million people. This means a number of new institutions need to be established in the various states in the union. These are being established largely in big cities and urban areas because these have been the last areas to develop. The challenge of numbers can only be accommodated through this kind of expansion.

The eighth challenge is an obvious one, the challenge of making the necessary changes in our teacher preparation programs. What kind of pre-service educational experiences should we develop? What kind of in-service development improvement programs would we continue? One of the young men who just graduated from the University of Florida, Dr. Michael Schafer, completed his dissertation in the area of developing a model for faculty in-service development. In the course of carrying out this research he interviewed almost a hundred faculty members in Florida community junior colleges. He examined the in-service development programs in the institutions where they work. Based on this information he was able to conceptualize a model for in-service development. One of his finding was that most faculty members envision in-service improvement in a rather personal way. They showed very little interest in activities designed to improve the institution. This attitude emphasizes, I believe, that the leadership of an institution must share the responsibility for developing a faculty in-service program. To leave such decisions entirely up to a faculty committee, for example, would result in a series of sabbatical leaves or other personal development activities. These alone do not constitute a satisfactory faculty in-service program. The leadership will need to encourage improvement in the faculty's depth in their academic areas and/or in their teaching areas, but there is also a need to increase the faculty's breadth, their understanding of students so that they can meet students needs, their enthusiasm for teaching and their understanding of the institution in which they are teaching. We need to develop a specific and definite plan so that faculty members will recognize what is needed in a complete faculty in-service development program.

It was interesting to note in Dr. Schafer's study that when faculty members were asked, "should new faculty members be given a lighter load so that they could have more time to become oriented and to develop their planning?" the only people who said yes were those who were first year teachers. Those who had taught more than one year said no, we ought to give the older teachers the lighter load. But based upon logic and concern for sound development of new faculty members, it would appear that plans for faculty in-service development would emphasize an arrangement which schedules new faculty members with lighter loads so they may have more time to prepare their courses. The atmosphere necessary to encourage innovation requires more time than is ordinarily available to an over loaded new faculty member. The use of the benefits of research must be recognized early in a faculty member's career and may not be imposed at a later time when it is too late to do much about it.

A tenth challenge is to define the goal of the post high school educational institutions in the socio-economic life of this country during the last quarter of the twentieth century. I mentioned as we began today in discussing the first challenge that we are facing the time when there will be universality of opportunity for higher education. Everyone will soon have an opportunity to continue their education beyond high school. To accomplish this will require a few changes in the present procedures. For example, a doctoral study completed at Florida State University recently by Douglas Windham pointed out that education is much more available to the wealthy than it is to the poor. Dr. Windham noted that families with incomes of less than $3,000 a year contributed $17,000,000 in taxes to support higher education in Florida and their children received only $10,000,000 in benefits. On the other hand those families in our state whose annual family income is above $10,000 contribute $38,000,000 a year to support higher education and receive $64,000,000 in benefits. According to Dr. Windham's study, the taxation-education process now in use perpetuates poverty. Those people who would be able to achieve a higher income because of a better educational opportunity are not in a position to take advantage of it and those who have less need of it as far as their income level is concerned are the ones who can take advantage of education.

A new college in Massachusetts has been experimenting with the idea that youngsters make better grades and are more inclined to go to college if they are certain that this opportunity will be available to them from the financial viewpoint. In order to test this hypothesis a number of students in the fifth grade in schools around Boston have been selected and told that they have been awarded a scholarship to enter college when they finish high school provided they meet the college's entrance requirements at that point. In other words the economic barrier is removed for them. As these young people complete high school there will be an opportunity to determine how much influence this fact has upon their achievements.

There has been other evidence which indicates that the results of a student's work in the classroom is very directly affected by the teacher's expectations. If we are really going to make post high school education available to more people there are some changes needed both in attitudes towards students and in the economic support for students who should receive an opportunity for continued education.

A second part of this challenge might be for us to look at whether a post high school institution, a community junior college, a technical institute, or an area vocational school can be an instrument of social change. There was a very famous and rather controversial book written during the 1930's by George Counts called Dare the Schools Build a New Social Order. There is certainly evidence to indicate that schools do very definitely affect the social order. We know that income is directly affected by collegiate education. There have been a number of studies which have already indicated that this is a very definite relationship between increased income and level of education. There are also a number of studies that indicate the influence of education on health. All of the research has indicated that the level of education and the level of income are related; the whole socio-economic order is very definitely affected by education.

The eleventh challenge is the challenge of institutional autonomy. We are entering a new period in the development of post high school education. The state legislatures concerned with providing support for education are very much interested in the operation of these institutions. Each individual institution will no longer be able to make unilateral decisions about its operation. Trends toward centralization and toward increased state level coordination are inevitable and will not be reversed in my opinion. However, for those of us who work in individual institutions there is a real concern as to how institutional autonomy which has been so important to our educational institutions in the past, may be preserved. Very briefly, I would like to suggest five principles which should affect this.

The first principle is that although coordination is a basic responsibility of the state, such coordination can be achieved best through leadership rather than control. A second principle is that where there is assigned responsibility there must be concomitant authority. The third principle is that the distinctiveness of each institution within a system of institutions should be encouraged. A fourth principle is that while the state agency must relate with all of its sub-systems or sub-units with impartiality and fairness, it must also be careful to avoid imposition or standardization in this relationship. To force everyone into the same mold is a mistake and is not necessarily a part of impartiality.

Finally I would suggest that the method by which a coordination is achieved may often be as important as the act of coordination itself. An old song that says, "It ain't what you do, it's the way that you do it" is important here. The challenge of institutional autonomy is the eleventh challenge about which we must be concerned.

The twelfth challenge is a challenge of new knowledge. We all remember the story of the county agricultural agent who visited one of the farmers in his area and asked him why he didn't come to the meetings which had been scheduled to improve farming in that area. You remember the farmer's answer was that he didn't farm as well as he knew how to already and so he didn't see any use in learning any more. This is about the way we handle education at the present time. We don't teach as well as we know how to already so we are not really anxious to learn anything new about it. Whether we are anxious to learn or not we are going to be forced to improve our teaching a great deal.

The development and the implementation of the systems through which has been applied to management of institutions and to teaching procedures may be nothing more or less than a reexamination of principles we have noted before. However, this continued emphasis upon defining attainable goals, choosing desirable alternatives or methods to achieve those goals and finally measuring our programs toward this achievement is going to force us to use some of the knowledge we have about teaching.

With these twelve challenges the task we face is to do a much better job of preparing people to teach. We need to prepare teachers who will employ the very best knowledge that we have. I would suggest four action steps to accomplish this.

First of all, I think, in any institution the quality is the most important item. Leadership will either encourage or stifle development of others. We need to develop the kind of administrative leadership and the kind of faculty leadership who will understand their respective roles in a collegiate setting as differentiated from a bureaucratic setting.

The second action step is to identify, recruit, and prepare faculty members who will be able to work in a new kind of institution. This means that they must have a background of general education which will make them functioning people in a 1970 situation not in a 1950 or 1940 situation. The need to have strong backgrounds in the areas which they will teach, but they must recognize that there are many roads to Rome and these strong backgrounds are developed through various avenues. Some backgrounds are built through concentrated courses in a university; some develop from experience on the job. We need to find ways of equating experience on the job with work in the university. We also must develop in prospective teachers the tools for teaching. It is not true that anyone can teach; it is not true that all those who know their subject can teach it; it is not true that anyone can walk into a classroom and begin to teach merely because he likes people; it is not true that teachers are born not made. There is ample evidence that all these statements are fallacies, yet we continue to hear them.

Finally, in any teacher preparation program we must provide the individuals with tools for self renewal. I suspect this is the area which we leave out most often. There must be provided to the individual who is to become a teacher the tools which he can use to keep himself renewed.

The third action step I would suggest is that we should begin to listen to students. What are students saying? There is good evidence to indicate that students may be far more effective in working with other students than faculty members are in certain areas. Those of you who have been good teachers know this from your own experience. In a junior college in Miami students were sent into pool halls to recruit students. It may never occur to most people that the school may have an obligation to recruit people for post high school education. After all they ought to take advantage of it without our encouragement! If we are going to serve the people of this nation in ways in which they must be served, however, then there are groups of students who must be actively recruited. The people who are most effective at this are their peers. So we need to listen to students and use them in effective ways in working with other students.

We also need to listen to students in terms of the things that they want and need to experience. Most of our post high school institutions develop inhibitions. They, as we said earlier, try to mold people into some preconceived form. As one example of this, look at the language in most catalogs. Most catalogs use such words as "scholarly, rigorous, critical mindedness, rationality, disciplinary." These are words that the catalogs use, but as you walk across a campus you find that these are not the words the students use. The students use words like "feel, like, love, joy, friends, appreciate." These words are almost at an opposite end and the curriculum seldom reflects this fact. The curriculum reflects what the catalog says and the students are rebelling and opposing this kind of approach to curriculum.

We need to listen to students in terms of their needs for counselling and guidance experiences. Every day important decisions are made by students which affect their lives from that point on. They need help in these decisions and they get very little in many instances.

We need to give students greater personal freedom. We need to give them the opportunity to do the thing that they want to do and feel that they should do. We often expect too much of students. We load them down in most institutions with five or six courses in a semester. When a student takes this many courses, he spends about 55 percent of his time on one course because this is the one which has the most interest to him or perhaps makes the most demands on him. This he concentrates on. He spends most of the rest of the time, about 40 percent of his total time on the second course. He spends up to 95 percent of his time on two courses. In the other three courses he learns to get by with a loose pen, a glib tongue, or feminine appeal. These are bad learnings but these are what we are often teaching young people. We are teaching them to develop a glib tongue, to bluff their way through or to use their feminine wiles to "pass" their course.

One of the fine things about the young people of these days is that they really have, for the most part, a much deeper sense and a much deeper regard for human worth and human dignity than has been true of some of our previous generations. Students today are not afraid to cry and to love; these are qualities which they do not attempt to hide but rather to encourage.

The fourth action step is to make a real attempt to change any grading procedures. When a group of 30 students come into a classroom, most teachers expect 10 of those students to do very well, another 10 to do fairly well and 10 others to fail. And since most teachers expect this, this is what most teachers get! We set up a situation in which we are successful with only a third of the class. I would submit that this reduces the aspirations and the effectiveness of both the faculty and the students. This is pretty poor motivation for learning and very systematically and cruelly destroys the ego and self concepts of two-thirds of the students. It alienates many students from school because we start this process very early. It is a very serious waste of time, talent, and the economic resources we put into education. It is based upon the assumption that there is only room for a few at the top. The idea is that there is only a limited amount of "goodies" and therefore we have got to provide some way of being sure that only a few people can reach the point where they will receive these goodies. These grading practices are in reality ridiculous and indefensible practices because we have enough research to know that everyone is capable of learning. In any group of students there are a few who have a special talent for the subject matter at hand. This group may amount to about 5 percent of the students. They will learn rapidly and thoroughly and very quickly. A few others will have some special difficulty because of a physical difficulty, such as deafness, color blindness, or any other physical handicap. So you have approximately 10 percent of any group who will either learn very rapidly or have some special difficulties. The other 90 percent can and should be able to learn most anything that any good teacher will teach them. The idea of choosing a set portion of these to fail is not supported by any kind of research data.

We make all kinds of ridiculous decisions regarding grade point averages. I am sure you are all familiar with the GPA, in fact, if you don't have a good one you can't enter the graduate school. You know when you think of this in a more logical way the GPA just doesn't make any sense at all. We take a grade from physical education and a grade from science and a grade from art and a grade from English and we average them up as if they all have the same meaning. We come out with a GPA. Then we make all kinds of life decisions based on this silly little number. We also assume that every faculty member relates to every student in exactly the same way and therefore, that if a faculty member gives one student an A and another student an A that means the same thing. We also assume that everyone learns at the same rate. After all there are 9, 10, 11, or 12 weeks in a quarter and we cut learning up into these little blocks so that people will learn within these little blocks in the same way at the same time. Yet we know none of these things are true. The recognition of the fact that some students may take two quarters or two semesters or even three to learn a certain area of content will be a step forward.

We also need to recognize that people learn in different ways. Somehow we feel that if we make learning difficult, it is more prestigious. I am sure you know of institutions that are proud of the number of people they fail. These are some of the things we need to take action on. We need to develop good administrators; we need to develop good teachers; we need to listen to students; and we need to take specific and definite steps for improving the curriculum.

These are the challenges; there are the questions. I don't pretend to give you the answers, but they have to be answered.

IMPLICATIONS FOR VOCATIONAL TEACHER EDUCATION IN 1969

John A. Beaumont

Thank you Mr. Dunn for your warm and friendly introduction. I have always appreciated the cordial reception that has been accorded to me on my visits to Tennessee. I am delighted to be here, to have the opportunity to meet with many old friends, and hopefully to make new friends. I must pay tribute to Dean Eddy, a member of the conference staff, for it was the Dean who gave me my start in vocational education when I served as a member of his staff in Texas.

When Bill Danenburg requested me to make a presentation at this conference I was both gratified and concerned. I was gratified because I spoke at a similar conference for Deans of Colleges of Education about a year ago, and this invitation was identified as a follow-up to that presentation. Further I believe that you in teacher education hold much of the future of vocational education in your hands. The extent of your ability to adequately staff and to improve the quality of staff will to a major degree determine the adequacy and quality of vocational education in this nation. To be invited to speak to you is a signal honor.

I was concerned because I am always suspicious of the one who flies in, spouts-off and flies out. In this situation it is difficult to get the feel of a meeting and to know what can be said which will make a significant contribution. The speaker does not know what has been said previously nor what has been discussed. If you are suspicious of me, I can truthfully say that I am suspicious of myself in this role.

As I understand the purpose of the conference, you are to plan programs of teacher education which will implement the Vocational Education Amendments of 1968. Unfortunately, plans developed at a conference frequently become just that and are never implemented. The problems of the on-going situation become dominant, and the carefully constructed plans are set aside. If your plans are to be meaningful, if they are to be accepted and implemented, they have to reflect what you accept as your role in teacher education. You are not going to carry out a plan which conflicts with what you believe to be your particular role. So I would hope that you have come to

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Presentation given by John A. Beaumont, Consultant on Vocational Education, Bradenton, Florida.

grips with an understanding of what you conclude to be the role that you perform. What are the tasks that you undertake? What techniques and skills do you need to perform these tasks? What concepts and beliefs underlie the role that you accept? Are you concerned about vocational education or only about a particular occupational area in vocational education? Do you have a responsibility for leadership development or just for master teacher development? Do you see vocational education as a means of human development and fulfillment, or just as a method of creating occupational skills? I do not intend to identify your role. That is your job. I would like to review with you a few points that I believe not only affect your role, but also should be considered in planning teacher education in vocational education.

The first point I would like to discuss is the current emphasis in vocational education legislation on "who" as contrasted to the emphasis on "what" in the early legislation. The basic vocational education legislation, the Smith-Hughes Act, is primarily subject oriented. It is this subject orientation which has been, and continues to be the basis for the accepted philosophy of vocational education. This subject orientation extended to federal and state supervision, teacher education, curriculum development, research and financial support. The George Deen and George Barden Acts continued this emphasis with the exceptions in the George Barden Act providing for guidance and administration. The Vocational Education Act of 1963 directed its emphasis to groups of people. "Who" became the dominant consideration. Unfortunately the vocational educator could not accept this change. His insistence in maintaining a subject matter dominance led to the passage of the Vocational Education Amendments of 1968 which do not change the emphasis of the 1963 Act but do mandate in law a responsiveness to the Congressional interest in people.

Let me illustrate this point by recalling for you how vocational education programs have been historically organized and developed. You first conducted an occupational survey in a community. Following the survey you decided to offer training in certain selected occupations. Then you obtained buildings, equipment, staff and prepared curriculum. Finally you set out to recruit students. The students or "who" became the final consideration. Today you are mandated by law to serve groups of people with great emphasis on the disadvantaged, and to design programs for these people which will enable them to acquire saleable skills. No longer can you say that an individual does not fit the program. It is your responsibility to design a program that will fit the needs of the individual providing him with services and instruction that is essential to his needs.

Let me reiterate this point. The current emphasis on "who" as contrasted to occupational subject orientation is the most significant factor in planning current teacher education programs.

The second point I would like to make deals with the rapid and overwhelming technological developments which have taken place in this society. Howard R. Bowen, Chairman of the National Commission on Technology, Automation, and Economic Progress indicates the impact of technology when he says,

> Technology is not a vessel into which people are to be poured and to which they must be molded. It is something to be adopted to the needs of man and the furtherance of human ends, including the enrichment of the personality and environment.
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> Technology has, on balance, surely been a great blessing to mankind . . . despite the fact that some of the benefits have been offset by costs. There should be no thought of deliberately slowing down the rate of technological advancement or hampering the freedom of discovery. The task for the decades ahead is to direct technology to the fulfillment of important human purposes. Much of this technology will be derived from the social sciences and the humanities as well as the physical and biological sciences. It will be concerned with such values as individuality, diversity, and decentralization rather than conformity, massive organization and concentration. It will be directed toward human, environmental, and resource development rather than the proliferation of conventional consumer goods. It will seek to make work more meaningful rather than merely more productive.
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> In the new technology, machines and automated processed will do the routine work. Human resources will be released and available for new activities beyond those that are required for mere subsistence. The great need is to discover the nature of this new kind of work, to plan it, and to do it.[1]

The kind of work which is developing as a result of technological progress requires much more than the physical skills which were associated with the industrial revolution. Technicians who have the intellectual capacity to operate the machines which perform the physical tasks are the basis of these developing technologies. It is the era of the paraprofessional who is performing tasks that were originally performed by the professional in the fields of engineering, health and science. This worker requires training which encompasses both the basic disciplines and the skill requirements of the tasks to be performed. No longer can the teacher educator conceive of his work as separate from that of the educator in the basic disciplines.

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[1] National Commission on Technology, Automation and Economic Progress, Technology and the American Economy, Vol. 1, 1966, pp. XI-XIII.

The statement in a recent report from the House Committee on Education and Labor explains this situation when it states, "Any dichotomy between academic education and vocational education is outdated."

The next point I would like to make is what might be called a need for a pathway to technology. In spite of the technological development, there is a continuing need for semi-skilled workers particularly in the service trades. These occupations can be readily filled by those who are moving from the rural areas to the metropolitan centers, and can provide a means for these workers to advance to the more sophisticated technical occupations.

These semi-skilled occupations require little vocational education, but these migrating individuals need training if they are to adapt to their new environment. Donald Super of Columbia University makes the following applicable comment,

> Vocational education meets the needs of only those who aim at the skilled trades, and fails to meet the needs of nearly half of the boys and girls who enter high school and then the labor market as semi-skilled workers. Although the legislation is so phrased as to make these pupils its charges, vocational education has, either intentionally or unintentionally, thrusted them off to general education or into the limbo of the dropout.
>
> It seems not to have occurred to leaders in vocational education that for the frequently changing semi-skilled worker education for a career-of-changing jobs may itself constitute the most appropriate kind of vocational education.[2]

For these potential workers migrating from rural areas, there are problems of relating to the conditions in metropolitan centers. It does the potential worker little good to find a job if he does not know how to use public transportation, find living quarters, purchase essentials, and live in the crowded conditions of urban society. It could well have been a great day for vocational education if we developed and staffed sending centers in rural areas and receiving centers in metropolitan areas where these individuals could have been prepared and aided in coping with their new problems.

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[2] Super, Donald E., "Challenges to Vocational Education During the Decade Ahead," The Advanced Degree and Vocational-Technical Education Leadership, 1966, p. 8.

Next I would like to touch on the mandate in the 1968 Amendments which forces vocational educators to concentrate much of their efforts on the disadvantaged and handicapped. A report of a national workshop on vocational education for the disadvantaged sponsored by the National Committee on Employment of Youth proposed the following eleven points as indicative of directions which must be taken by vocational educators in response to the needs of disadvantaged and handicapped persons;

1. **Recognition of the complex interaction of an almost overwhelming variety of education, health, housing, transportation, geographical, legal and family problems, the solving or amilioration of which may be essential to successful preparation for employment.**
2. **Early introduction of rehabilitation efforts to offset the debilitating effects of deficient home and neighborhood environments.**
3. **Outreach to bring to the disillusioned or ignorant knowledge of opportunities too easily ignored.**
4. **Orientation to the world of work for those deprived exposure to work habits and knowledge of alternative vocational choices.**
5. **Integration of basic education and skill trainin for very low levels of the former, prevent success in the latter, while the obvious relevance of the skills provides the motivation for the more academic offerings.**
6. **Direct link between the school and the job.**
7. **The incentive of a direct and obvious job promise for those frequently experiencing overpromise and underdelivery.**
8. **Empathetic and relevantly trained staffs who do not necessarily meet the traditional credential requirements.**
9. **Eliminating arbitrary and inflexible scheduling practice as well as inappropriate entrance requirements and testing methods.**
10. **The provision of critically needed supportive services to help deal with the variety of institutional, social and personal handicaps confronting the disadvantaged individual.**

11. Awareness that (a) rejection of low quality job offerings may be as often the reason for unemployment as the lack of requisite skills, (b) those in poverty while working at low wage jobs exceed in number those suffering from unemployment and therefore, (c) increasing the productivity inherent in the job may be as crucial as the productive potential of the worker.[3]

Vocational educators are mandated by legislation to expend more of the resources provided by federal funds on those who must catch up to enjoy the benefits of this society. Congress has stated that an attempt must be made to obtain equal results for all students by the committment of greater resources to those who need the most. Teacher education has given little attention to the preparation of teachers who can serve those with the greatest needs.

Next I would like to touch briefly on some economic concerns which effect the world of work. The Employment Act of 1946 gave acceptance to the concept that governmental policy was committed to direct involvement when the economy encountered either a recessionary or inflationary period. As an example, you can see the interest policy that the government is currently pursuing to combat inflation. As a result of developments following this legislation, the economic policies of the country have tended to maintain high levels of employment and to generate growth in the economy.

In a full employment economy, youth and other workers are able to obtain jobs readily. The demand for labor is exceedingly brisk and permits a high degree of mobility in labor. There is involved in these policies the need for training of youth for a world of work, which is quite different than those training needs which are normally associated with periodical fluctuations. It is essential, therefore, that you in teacher education prepare teachers who understand the economy in which their students will secure jobs.

Another significant point facing vocational educators is their reaction to the developing social conscience of this nation. We see the stirrings among consumers, youth, minority groups, church groups. These movements take the form of demonstrations, requests for changes in the law and in some cases actual defiance of the law.

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[3] "Vocational Education for the Disadvantaged: Summary of a National Workshop," Presented at the National Workshop on Vocational Education for the Disadvantaged, March, 1969, pp. 4-5.

In the preparation of young people for the world of work, should the vocational educator be concerned with either the performance on the job, or the selection of the job? In marketing is it important to teach the concept of service or the concept of let the buyer beware? In the technical fields should the young technician be made aware that some job openings will occur in corporations which for generations have been polluting the air and the water of this nation? Should the vocational educator go a step further and suggest that the young technician concern himself with deciding whether he will work in an establishment which contributes to the development or the destruction of mankind? The teacher educator can be a force in fostering the development of a social conscience in the preparation of teachers.

Recent legislation has created a shift in vocational education responsibilities. Vocational education unlike general education was initiated in this country primarily as a national concern with the passage of the Smith-Hughes Act in 1917. At the time of the passage of this legislation, there was little evidence of vocational education being accepted as a concern of educational institutions. It was quite logical, therefore, that the leadership role in the development of vocational education should emanate primarily from the national level to the states, and subsequently to the implementation of the programs at the local levels.

This pattern of operation continued and was reinforced through amendments to the Smith-Hughes Act. With the passage of the Vocational Education Act of 1963 there was an effort made to place more responsibility on the states and through the states on the local communities.

Unfortunately, these responsibilities were not willingly accepted, and the states and local communities continued to look to the Federal government for leadership. In the Amendments to the Vocational Education Act in 1968, Congress specifically placed upon the states and the local communities responsibility for program development by requiring that plans for the implementation of vocational education be submitted annually by the states to the Federal government and by the local communities to the states. The federal leadership role is directed to administration and statistical responsibilities.

Further, the local community is given the right to appeal decisions of the State Board of Vocational Educators in regard to allocations of funds by requesting a hearing for said purpose. If the results of the hearing are not satisfactory to the local community, it can appeal to the courts for a final decision.

There is also in the 1968 Amendments provisions for not only the customary State Board of Vocational Education, but also for the appointment of a state advisory council for vocational education, which is to reflect the interest of the citizen, both professional and lay persons, in not only counseling and advising the state board, but also in evaluating vocational and technical education programs, and reporting same to the state board, and to the Federal agencies concerned.

All this implies the shift of responsibilities and leadership to the state and to the local communities. Therefore, there arises a tremendous need for a differentieum phase in the preparation of vocational education personnel for state and local positions.

This point leads to the major concern in vocational education in the immediate future which is the development of competent leadership. David Katz of the University of Michigan makes an important contribution when he says,

> Perhaps the most general conclusion that can be reached is that leaders in vocational and technical education can no longer follow their specialized and narrow roles. They must be trained in doctoral programs which are as broad and deep as the other disciplines. They must be both specialists in vocational education and behavioral scientists as well. This is necessary because they must be able to understand and assess the trends of environmental and social change. They must be so trained as to be competent consumers of behavioral science research if not researchers themselves. They must be able to comprehend the complex interrelationships of our social system and its many component subsystems and to appraise system change in terms of new inputs and resulting organizational modification. They must be able to relate their own profession to industry, to government, and to education in general. They should be able to conceptualize the new emerging relationships and set new goals for their field.[4]

The tasks of the vocational education leader may be listed under five major headings, (1) policy formulation, initiation and change, (2) program development and implementation, (3) involvement with staff, (4) community involvement and (5) evaluation. These tasks require a broad knowledge and range of techniques if they are to be performed adequately. Further these tasks are performed in an environment to which the leader must be sensitive. This environment includes economic and social forces which have a major bearing on not only the implementation of the program, but also on the priorities which are established as a basis for designing the program.

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[4] Katz, David, "A Doctoral Program in Vocational Education as a Behavioral Science," The Advanced Degree and Vocational-Technical Education Leadership, 1966, p. 20.

Further, he is faced with developing these programs through the political forces, which in large measure control both the direction of the program of vocational education and the resources which will be provided for vocational education as it struggles to obtain a share of the total resources which are devoted to a wide variety of public services.

Therefore, it can be said that the vocational education leader requires both expertise in vocational education, and expertise in relating vocational education to the environmental, cultural, social and economic forces in which vocational education services are delivered. This becomes a major responsibility in teacher education for too long have vocational education teacher educators been content to expend their abilities on the preparation of master teachers, and ignored the greater responsibility of preparing leaders who can make possible the programs in which the master teacher can effectively render a service to the youth and adults in the nation.

Finally I would like to emphasize the need for some changes in priorities in the teacher education program. There is an increasing need for staffing at the post-secondary level, but there is little evidence that teacher education has given much attention to this need. Secondly there is a need for planners, researchers, curriculum specialists, and leaders in vocational education. The past emphasis on preparing the master teacher for secondary education is no longer the complete task of teacher education. Unless you can visualize the broader role demanded by current legislation, and reorganize your program to meet the demands of this broader role, you have little place in teacher education today. Thirdly there is a great need for work on the problem of differentiated staffing. Vocational education has many opportunities for the aid, for the para-professional, for the curriculum consultant and for a wide variety of staffing. At the teacher education conference held by the Center for Research and Leadership Development in Vocational and Technical Education, the Ohio State University in the Fall of 1968, Dwight Allen delivered an outstanding paper on the topic of differentiated staffing. If you have not seen this paper, obtain a copy from the Center and study its implications for vocational education.

I have tried to bring to you several points which I believe to be significant in the planning of a teacher education program in vocational education which will meet current demands. In brief the points concerned the following:

1. The emphasis of who as contrasted with what

2. The technological developments in this priority

3. The need for a pathway to technology

4. The mandate to serve the disadvantaged and handicapped

5. Economic concerns which effect the world of work

6. The developing social conscience in this nation

7. The shift in vocational education responsibilities

8. The development of competent leadership

9. A look at emerging priorities in teacher education.

The question always arises as to what you as an individual can do in this complex educational institution. I would like to make the following suggestions:

1. Accept vocational education as a meaningful and identifiable reality which performs a distinct role in the main stream of American education. Further resolve to undertake research which will enable you to present vocational education as a teacheable body of knowledge.

2. Place "who" in the forefront of all planning and implementation of vocational and technical education programs.

3. Take an active role in bringing about cooperation within the vocational education establishment, with education, and with the community at large.

4. Relate your efforts to the achievement of desirable economic and social goals.

5. Make every effort to understand and to become involved in the political system through which you must implement your plans for vocational education.

6. Move toward a more flexible system within the higher education institution, particularly in service to people, in changing outmoded requirements and in evaluating on the basis of current competency rather than past achievement.

7. **Recognize your role as managers of learning, specifically in vocational education, and not as experts in substantive areas.**

8. **Finally go on the offensive, and make known the strengths of vocational education particularly in motivation and methodology.**

Thank you for the opportunity to participate in your discussions.

TEACHER CERTIFICATION FOR THE FUTURE

Bob E. Childers

Like Minnie Pearl says "I'm just so proud to be here." Charlie gave you a little bit of my background and where I have been. That is the first time he has ever introduced me and had some factual data. Usually what he does is take our preliminary experiences in the preparation of Tennessee's State Plans of 1963 and uses this as the basis for introducing me, and that doesn't always work out as well as you might think.

While I was principal here in east Tennessee we made a trip to the Naval Academy, compliments of the U. S. Navy. There were a large number of professors from the University of Tennessee and principals and superintendents from East Tennessee were all on that one plane going up. Someone happened to make a comment that education would probably be destroyed in East Tennessee if that plane were to crash. Some wise guy in the back of the plane made the comment. "No, it would probably be advanced about twenty years." As I see this very distinguished group here collected under one roof for the field of vocational education and teacher preparation, I sometimes wonder about the same thing. You know we are in the flight pattern from the Knoxville Airport out here.

Well, something a little less morbid now. Let's discuss the field of Accreditation in Vocational Education and Certification. Now the topic that is on the program, as you will note, is something to the effect about the future certification of vocational education. Don and I discussing the topics over a period of time talked about several different topics so I really wasn't exactly sure about the specific concept. I took everything I knew and lumped them into one little bunch and came up with this discussion which may or may not relate to the subject matter reflected in your program. I think there are three areas that closely relate to this and I would like to relate them to you because I think they are significant at this time in the evolvement of vocational education in this country.

The field of certification is one of the factors, accreditation as a factor, and professionalization as the third. I would like to center my topic around these three major areas and still relate them to the future of certification. All that I say this morning, I am

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Presentation given by Dr. Bob E. Childers, Executive Secretary Southern Association of Colleges and Schools, Atlanta, Georgia.

confident everyone here is not going to agree with. If you were all going to agree with what I am going to say there was no basis for me to have said that to begin with. I think the point of my discussion today should be double, first of all to challenge you in your work to accomplish some of these standards and another thing to cause you to begin to think about some of the potentials or probabilities. Unless you do this in this entire conference I think this conference will have been wasted. All that I say I amy or may not agree with myself, I may be saying them just from the standpoint of getting you to think about the problem. I always say this at the beginning of a discussion and then at the end of it if something comes up and somebody really pins me to the wall I can say, "Well I really didn't believe that, I was just trying to make you think about it."

A little background here in the Vocational Act of 1968, we have a new challenge as indicated to us earlier about what can take place within the field of vocational education. Unlike the legislation of the past which has been program centered which has been operational centered rather than end results centered or student centered. I think in the Vocational Act of '68 we have some stops that have been eliminated for potential development in the field of teacher education, student education and occupational training. In other words, many of the structures that created the dichotomy of the past between vocational and general or vocational and academic education are no longer characteristic of this new act. Here is one of the big problems that exist within the structure of the act itself. That is that the program or the method of the administration of the program is still determined exclusively by the state that prepares the plan and the local school systems that must also prepare plans. I am in favor of this approach. I think it is a sound approach. I think it is a reasonable approach. I have been concerned for many years regarding the program of vocational education and I have heard the criticism leveled on many occasions from local teachers, from teacher educators, from state department personnel, from vocational educators at all these levels, that proper leadership is now not eminating from the Office of Education the way it once did. We no longer have the leadership that is moving us forward in the direction that we need to go. If we believe in local autonomy of education, if we believe in the prerogatives of the local school system to implement vocational education or any other form of education, then we cannot depend on the Office of Education as the prime source of leadership to accomplish these goals. One source of leadership is the group that you all represent here. The field of teacher education for vocational education. The Vocational Act of 1963 can not be implemented unless there is an effective and progressive program of teacher education, there must be an adequate supply of teachers in vocational education to carry out those programs. I maintain that the need is more critical today than it was in 1963 or in 1917 or at any other time.

The Legislation of 1968 provides some rather sizable funds within special categories of instruction. Many of which our current teachers are not prepared to teach. In talking to local teachers in conferences over the past few years, in which local teachers and local administrators discuss the problems involved in the implementation of the new system of education everybody is still talking about how they are going to implement the Act of 1963. I suppose in 1963 they were still talking about how they were going to implement the Act of 1946. In 1946 I am sure they were talking about how they were going to implement the Act of 1917. Now I don't know what they talked about before 1917, that was before my time. It is time to stop talking about what we are going to do, and start doing something about meeting some of these specific needs. Teacher education above all else is one of the crucial areas that must approach the problem in a more rational basis in order to provide occupational teachers prepared within the fields that are reflected in the categories funded in the Act.

Let's look at some of the activities that caused the development of this and what has happened to the field of leadership in vocational education over the past few years. Theoretically the center of leadership under the original Act of 1917 was to have come from the National Board for Vocational Education, all of you recognize the historical aspects that created this. The Act of 1917 required the state to plan the method of implementing the programs provided. Each of these programs evolved as a result of a specific set of guidelines presented by the Office of Education to meet the requirements of the Act. It would seem that one of the problems in the field of leadership is that the people that are responsible for the implementation of the program have either been controlled to such a point that they were not, or they could not implement the leadership necessary to carry out a new type of program, or they were unwilling because there were certain controls that they used as a limitation.

From the standpoint of the local administrator that was charged with the responsibility of the administration of a vocational program I found that when I got ready to do something a little different from what had been done in the past it was always pointed out to me that I could not do this because of one of three reasons. The State Plan did not let me do it, the state regulations or teacher certification would not let me do it, or the accreditation standards of the Southern Association of Colleges and Schools were such that I could not do it. These were always barriers to me in being able to do new things rather than opportunities to accomplish new goals. In each of the cases when I wanted to make a change at the local level it was not the matter of a lack of funds, which we have always used as a basic reason why we can't change vocational education. Many of these problems could not be changed because of other limitations rather than money. When I was with the local school systems I had to accept the fact that these couldn't be done because I was not in a position to make decisions or I was an over worked principal that didn't have time to do anything else but run the lunchroom and patrol the halls. Therefore, I couldn't get involved in the curriculum matters or improvement of the program offerings.

I was talking to the superintendent of a major city schools system not long ago who said, "The worst thing we did to the local principal was when we took the responsibility of operating the athletic program, monitoring the halls and running the cafeteria program away from him. Most of those people now don't have anything to do and for the first time they come to realize that there is responsibility other and beyond these minor items in the local school." When we created most of our area vocational schools, we didn't give them cafeterias, we didn't make it mandatory that they monitor the halls, and they didn't have an athletic program so we eliminated the usual excuses at the beginning so the poor vocational teachers and directors had to start to work right at the very beginning in developing and improving curriculum. What is important is that many of the things that we assumed to be limitations within the state plan are in reality not limitations at all. It was simply that they were different from what had been done in the past. Consequently, I could not do them because I was not willing to step out on my own and undertake new things.

When I came into the state office I began to realize that the State Plan is nothing more than a document created by the state to implement a program and it is as simple as that. The controls are as diversified or as straight as the state effectively wants to make them. All it has to do is stay within the limitations of the guidelines, and the guidelines themselves, especially the Act of 1963 were rather liberal in what we could do. In our discussions about how we were going to write this plan and how we were going to implement the different phases of it, we discovered over and over that the basis of the criteria that we were using, the reason for putting teacher qualifications within the program and into the state plan, was that they were in the other State Plan. It it was in last year's State Plan, it ought to be in this year's State Plan too. We went back to the other State Plan to find out the reason it was in the one written in 1946 and found that it was written in 1917 too. So there is no real basic criteria for the reason it was in there. The control over length of programs entered into the same structure is that we had no criteria, no justification at all other than the fact that at one time the regulations had said the trade and industrial programs had to be taught three hours per day or a minimum number of 15 hours per week. This wasn't in the last Act, but I think we put it in the last State Plan. The limitations are more often than not, limitations established abstractly or assumed by the vocational administrator. The contents of state plans are based more often than not on the content of what happened in the past, in other words over the precident that it established, not over the prerogatives, or over the opportunities, or over the research, or any other data that substantiates the criteria for the reason it was there.

The next item that I found that limited me in my system was that accreditation standards would prohibit me from developing certain types of programs. Because for instance, "Accreditation standards required that every teacher in the high school has to have a degree." "Every department chairman in the university had to have a doctorate degree." When I actually look at accreditation standards, I find that this is not the case at all. The standards for the accreditation of a local high school or college are written in a form that is broad enough to say that the person will be qualified to instruct in the area for which he is responsible. As a high school principal I thought I couldn't have vocational programs at one time because all my vocational teachers didn't have degrees. I found out, luckily before I moved into the state level, that this was not true. I found later that many local supervisors, principals, and state department personnel advocate that everyone has to have a degree to teach in any program of public schools because accreditation requirements mandate this. The state committees in each state administers the accreditation standards for that state. Often they do interpret "the equilivant" as being a baccalaureate degree only. Many of the standards that we assume have been established as fundamental for the operation of programs, more often than not, go back to some non existent rational that has been assumed over a period of time, rather than has been involved in any scholastic study or evaluation to determine the reasonableness of the standard. As long as we make the assumption that such and such is so without validation or justification, we will find ourselves hidebound to a set of worthless rules, "full of sound and fury," but worthless for improving anything. Find out why before you assume that these things cannot be done.

In 1895 the Southern Association was created as an association of colleges and institutes of higher schools for the purpose of improving education in the south. At that time one of the main purposes for the creation of accreditation standards was to establish a procedure for classifying institutions. One difficulty in 1895 in the southern states was that the bulk of the training above the sixth, seventh and eighth level was not available in the community in which the child lived, but most often occurred in a boarding school or institute some distance away. The educational opportunity for the majority of students was only through the fourth or eighth grade and depended on what the local school had to offer. Institutes then developed to fill the void of training above that level, but of less than college level. Most of them were private institutions established by school masters or by an association to prepare students to enter college. Many of them were Baptist, Methodist, Presbyterian, and Episcopal Associations who wanted to provide Christian education for the young people who desired to be ministers. One problem that existed was defining the point at which a boy was ready to go into an institute, and the level of eighth grade up was rather unclearly defined. There was no definitive structure as to when a child was ready from the high school program or for the college program. One of the problems that the Association wrestled with during the first meetings was the determination of at what level high school stops and college starts. Fairly logically the relationship between programs related to those specific programs only. A person that went to high school was preparing specifically for an entry into a college. There was no other entry level or opportunity available for them. If he went to a residential center or an institute in order to get academy level training then he had to go from that on into a college which may or may not be in his own geographic area. Therefore, the first problem wrestled with was the determination of where that program closed, where the high school stopped and college started. This worked real fine in the general structure of the program up until the technicalogical revolution when we created in the south especially a new institution we refer to as an area vocational school, a trade school, a junior college, or technical institute. The accreditation process related to these other programs only if these other programs happened to have been a part of an existing institution preparing for the next level of education. The sequence of education mandated elementary school, high school, college, university. It was this system that characterized the ladder of education. The fact is now that in the south only about 40% of the students in the high school enter the labor market prior to high school graduation. No program is available for the bulk of these students except in special categories or any industry training. Of the high school graduates only 50% are going on to advance level training at the college level and of those that go on to college only 50% are graduating. Statistics of this nature are immaterial in this discussion, what is important is that the academic structure dominated the accreditation process and still does so.

About a year and one half ago, in 1967, the Southern Association of Colleges and Schools recognized the problem of the new type of institution being created which did not fit within the academic ladder. Occupational education fit within the academic structure only when it was a part of an academic program or was associated with an academic program. As a result of this, the leadership in several states forced the categorization of special vocational programs into the academic structure and not as separate institutions. The southern states, more so than any other section of the country created separate systems of schools apart from the academic collegiate structure. The trade school concept was comparatively new within this part of the country until the late 50's or early 60's at which time some of the states began development of a new system of trade schools. Some of the states related to the academic structure for the accreditation process through the junior college or the technical institutes. At a meeting held in Atlanta in July of 1967, a group of industry, business, and vocational educators identified the need for a new system of accreditation within the association and requested the trustees of the Southern Association of Colleges and Schools to develop a new program to accredit occupational programs where ever they might occur with the development of equality of status in the vocational schools to that of the status enjoyed in the academic program. The prime cause that was presented by educators and industrial management was that vocational education programs deserve the same status as the academic programs. It is very unfortunate that the dichotomy had existed and still exists within the education between academic and vocational education. This separation of concept has created a dichotomy which has effectively blocked development of many programs.

The fact that every state must have a distinct board of vocational education has increased this dichotomy. Vocational funds as a result of the Act of 1917 and 1946 and 1963, have many cases been used as supplements to vocational instructors salaries. Many teacher education institutions receive a special supplement for the college to provide for teacher education programs for vocational teachers. A few states provide no supplement, on the assumption that the legislative appropriation that provides for all teachers should provide for vocational teachers too. In many states, in order to provide a program within the academic structure of a university it is necessary that a special fund be provided to the college for teacher education. Vocational education ought to be a part of the overall program.

An illustration of the complexity of the system is found in the Vocational Education Act of 1963. This was the first time money for construction was available for area vocational schools. Such schools can exist within a high school, as an independent school at the secondary level, as a department within a senior college or a university, or as a department of a junior college, or can be a separate post secondary institution at a technical institute or trade level. Within these categories then we have all kinds of systems for area vocational schools. Assumably the program that is within the junior college will be equal to the program that is within the area vocational schools separate from them. We find most frequently that the junior college does not assume this to be so. One of the reasons is the colleges assume that every person that enters the school at the junior college level must have a high school diploma or its equivilent. We find that the standards as interpreted by the College Commission require high school graduation as a requisite for entry into Collegiate programs.

The National Commission recently prepared a plan in which they advocated a new system for accreditating occupational education. The answers from many of the regional associations indicated that they did not assume there was any question or problem in the accreditation of occupational programs and the vocational programs deserved all they were getting. Therefore, there was no reason to change any of the structure or any of the associations involved in accrediting vocationa education. Some of the standards that were advocated for accreditation made changes in accreditation necessary.

The proposal was that the regional associations adopt a plan of categoric accreditation for institutions offering both academic and vocational technical programs and that each category be the responsibility of a separate commission. That the foregoing be accomplished by a limited alteration of the rolls of the existing college and secondary commission and by the creation of the information on vocational technical education in each of the Regional Associations. That the three commissions in each region be separate but cooperating agencies with the following general powers and responsibilities. The commission on colleges was to evaluate and award accreditation for academic programs and collegiate institutions. The Commission on Secondary schools was to evaluate and accord accreditation for general education and college preparatory programs in secondary schools. The commission on Vocational-Technical education was to evaluate and award accreditation to the vocational-technical programs in collegiate institutions awarding the associate degree. In secondary schools with five or more vocational curriculum and vocational technical institutions which do not require academic accreditation the only recognition would come from the Vocational Technical Commission. And lastly the commission on vocational-technical education would be organized to be broadly representative of vocational educators in collegiate institutions, comprehensive secondary schools, vocational-technical institutions, and would also include academic educators. The commission on vocational technical education and the appropriate college or secondary commission would arrange joint visits to institutions which are being evaluated for regional academic and vocational technical accreditation. The list of accredited institutions would denote whether a particular institution holds academic accreditation or vocational technical accreditation or both.

After the proposal was presented the responses weren't overly favorable. The junior colleges generally make the assumption that this is fine and good for all institutions that are to be accreditated from now on. They are already in so they should be excluded from this new structure. The associations indicated that they already have commissions on colleges, and in one case on junior colleges, and commissions on secondary schools. What they want to do is remodel what they have to reflect what this new system would do. I might buy either of these concepts on the basis that it accomplishes the purposes of improving vocational-technical education but there is a criteria more critical that has not been considered. Past accreditation has related primarily to the institution and the process through which an institution goes to educate its students. The responsibility of an institution ceases when that student stops being a part of the institution. The high school drop-out is not a responsibility of the high school once you get him out of the building. The college drop-out is not a responsibility of the college once you get him out of the college. We believe in the basic principle that every person in this country has the right to fail. Maybe if we used Peter's Principle at its apex we can demonstrate the same thing. Now for those of you unenlightened, Peter's Principle is the principle that every person will achieve within his promotional possibilities to his highest level or incompetence. All of us are promoted as long as we do the job, but when we get to the level at which we are incompetent we remain at that level of incompetence, therefore our economic and social system is operated by incompetents. In education it means that every person is promoted through the process of education to the point which he fails and there he remains as a drop-out from the ladder of education. If we want to use this criteria then every body reaches this point at one time or another because all of us have failed, because all of us are not still in school. All of us will reach at some point the highest level of education opportunity available to us. All of us in effect, are drop-outs. This is basically the standard on which we are operating now for the education of the populace. This right to fail within the process.

In the development of standards for the occupational education we are looking at as a matter of evaluation, not necessarily the process but the end product, the student. If a student enters an institution which has no program relating to that students needs, then the program of the institution cannot be of a high quality because it doesn't help the student. One of the basic criteria in the accreditation process is the philosophy of the institution. It makes no difference if the philosophy doesn't hold water, what is important is the fact that the philosophy is what you operate on. What we maintain is there is something pre-existent to the stated philosophy in the assumption that philosophy is as much what you don't do as what you do. You can't delimit a structure in which you are going to exclude everybody elses needs. You have to have a comprehensive program that does include them. Therefore, the evaluation of an institution under occupational education can't look just at the courses that you are offered in the institution but we must look at all those courses that should be offered as well. In other words education is meeting the needs of a community, and this should be the purpose of the institution. The institution must then meet all the needs of that community, not just a limited group. If an institution reaches the accreditation standard, it has to have adequate programs to relate to all of these needs. Obviously, all institutions can't be everything to everybody, and it can't meet the needs of everybody, but the question is what do you do for the student that comes to you? You have got to look at your product, you have got to look at your student, you have got to center your programs on the needs of the people in the community not the needs of the institution itself. In more classrooms, more teachers and more money are not necessarily an answer; What programs do you have? What programs are related? What is your source of supply of all this?

We now come to the field of teacher certification, and how this might relate. Teacher certification requirements indicate that in order for an institution to have a quality program the teachers must be able to teach effectively.

The Vocational Education Act includes a mandate that at least 15% of the total Federal funds for the new Vocational Amendments of 1968 will be spent for the training of the disadvantaged. These are programs specifically designed to meet the needs of disadvantaged. In talking to state directors, supervisors of special needs programs, and service area supervisors, I keep hearing over and over again that, "I don't see how we can possibly meet the requisite of 15% more money in each of these programs for the disadvantaged. So, what can we do to reidentify those students we are now serving that they become disadvantaged students or handicapped students for the program." No change in program, just identify them on the records differently. The annual reports, must be adjusted to reflect this new change within the structure.

We do nothing more through accreditation than that, then we haven't changed anything at all. Accreditation itself must relate to social change and it must relate to educational change in our institutions. It is crucial that it do so and until we get to the point in which we recognize or accept the standards which are designed to meet the needs of all students, then we are not responding to the needs of the public. Nearly every high school and college evaluation I have seen all state as a part of their philosophy that they will meet the needs of all the students in their geographic community. If they are going to meet the educational needs of the community then, the students should include not only those within the institution but those that are not there as well. There has to be an equal out-reach program as the in school program. You have to have just as high a quality of program for the out house as for the in house. If this be true, then, we have to rearrange and reevaluate standards to accomplish the goals of those institutions. I will affirm that accreditation is only one of the processes in which this can be done.

What place then does certification have within this process if this be true? We can go to any number of structures. One of the big weaknesses we find in vocational education is that certification standards are universally left to the State Department of Education.

There is usually no advisory council to aid in determining certification standards. If there are executive committees for setting the certification requirement in the state, more often than not they include only professional educators. It becomes then, an exclusively in-house process that determines certification standards for themselves. Certification standards of vocational education, as much as for any one else has a difficult time with certification requirements. The fact is that teachers might be accepted under certain cases in limited structures if they don't have a baccalaureate degree, but the universal standard we find in almost every state is the prerequisite of a baccalaureate degree, or if we accept some on a special category then they have to do a certain amount of work beyond the level at which they start, toward a baccalaureate degree, or they are given one, two, three, or four years to get a baccalaureate degree.

There is some inter-state acceptance for programs of certification for academic teachers more often than not the state does not accept certification for the vocational field. If a person is certified to teach vocational education in a high school in Tennessee he cannot be certified to teach in Georgia or Kentucky or Illinois. He has to meet a different set of criteria and a different set of certification requirements. There may be significant difference in the state of Illinois against the state of Tennessee, and a significant difference in the state of Florida, to the state of California. Orange juice in Florida is vastly superior to the orange juice in California, ask any Floridian. But I am not sure if this is true. I am not certain that there is that much difference in the educational process, or educational standards in the two states. Therefore, there is equal justification for acceptance of certification from one state to another.

We want to talk about certification standards for the future. I would say that one of the first things that we need to work on is this business of reciprocity of certification among states. I believe it to be one of the prime problems of the day. Vocational educators now probably are a more mobile group than they ever have been in the past. The majority of the people trained in any vocational teacher education program this past year are not now teaching in the state in which they trained. They are teaching in some other state or if not they may wish they were. We are more mobile now in the field of education than we ever have been in the past. The technological revolution calls it a mass mobility of people. The higher the level of education the greater the mobility of that level of population. If this be so, then we need to have a much closer relationship with other states.

One area of need today is improving teachers of certain technical, trade and industrial fields. Nearly every certification standard requires the person to go back to college for additional educational experience. Most of our certification requirements now require, once

4

a person gets a baccalaureate degree, that they must return to school over the next five years in order to get the next level of certification. At the end of five years they must either teach or progress through a level of additional instruction within the university or college in order to maintain this certification. Few states have certification standards that mandate that in order for a person to teach in a vocational program he has got to go back to an industry for an equal period of time to that of his academic preparation. Nearly all mandate that a person will go back and get additional academic preparation. Recognizing that in the technological changes that are now occurring that the degree of technological change has caused a significant change within the industry. We generally estimate that it takes forty years for a new innovation in education to be fully implemented across the country. In industry a technological change can occur within a single year. Take this television kinescoping unit here. A few years ago there weren't more than one or two companies that had such tape recording units available on a low cost basis. Now there are at least fifteen different companies that produce this equipment. This is a tremendous new technological change. A person in electronics, trained five years ago, is completely out of date with this field altogether. My technical training was in electronics. I have walked into some electronics shops recently and found electronic equipment that I didn't even recognize, much less know how to operate. I have been out of touch with the field of electronics since then. Equal to the importance of our experience within the classroom, is the need for the experience within industry. So equal to the need for requiring people to secure more academic instruction through in-service programs is the need to return to industry for updating. I will even carry this one step farther. If we assume the teacher needs to go back to the industry periodically to remain competent within the technical field, might not we also assume that the university professor that prepares vocational teachers and the vocational administrator should also go back to the classroom to get the experience of the teacher within the classroom, or maybe go back to industry too. If we are to prepare people for a certain area of occupational competency, it is also as characteristic that we get that same type of experience as the student.

We assume that changes must occur in education. Equal to that change is the assumption that we as individuals must change as well. Whether we talk about accreditation, certification or professionalization of our area of endeavor, it is important that we recognize that all others will change, therefore, we cannot remain the same either. If we assume that academic educators have got to give a little, vocational educators have got to give a little too. We have got to provide equal opportunity for everyone to become involved. In this program of accreditation we hope to look at all the processes and products of education, not just what is in a specific institution but all that should be included as well.

In the educational psychology or the psychology of learning we have learned fairly acceptably that these are three levels through which a person goes in the educational process. That is the percepitualization level, the conceptualization level, and the generalization level. Three distinct levels of learning through which an individual goes in order to accomplish a new skill or new accomplishment. If we assume this to be characteristic of the people within the public schools then it might also be characteristic of vocational education. It seems to me that with the Act of 1917 we went through the proceptualization period. We identified what we are and what we ought to become. We have identified the structure under which we shall operate. With the Act of 1946 and 1963 we have gone through the second phase, the conceptualization phase. We have developed values, we have identified that the prime value of occupational education should be the individual whom we are seeking to serve, not the institution nor the instructor. We have the values established. Now today in our programs we generalize. The full force of the generalization cannot occur from the individual teachers at the local level. It has to occur at the teacher education level. What can the teacher at the local level have but what he has been imparted either within industry or within teacher education. I would mandate that as a part of this process we have to generalize the structure of teacher education to accomplish all these projections. I hope that this is the purpose of this conference, that you might develop some more effective systems or sequences to which it would be accomplished. Accreditation can't do it alone. Certification can't do it alone. Teacher education can't do it alone. It has got to be equal to all the phases of the text, at the administrative level, at the teaching level and at the practicing level of all these phases.

THE TEACHER INSTITUTE

A PROJECTION OF TEACHER EDUCATION FOR THE '70'S

Donald V. Brown

This paper is addressed to the preparation and inservice training of technical and industrial teachers through a combination of industry and university facilities, equipment and personnel. The project at Oak Ridge, entitled Training and Technology (TAT), has two major program components:

A. Worker training of disadvantaged youth and adults in six vocational fields (T & I).

B. The Teacher Institute, designed for:

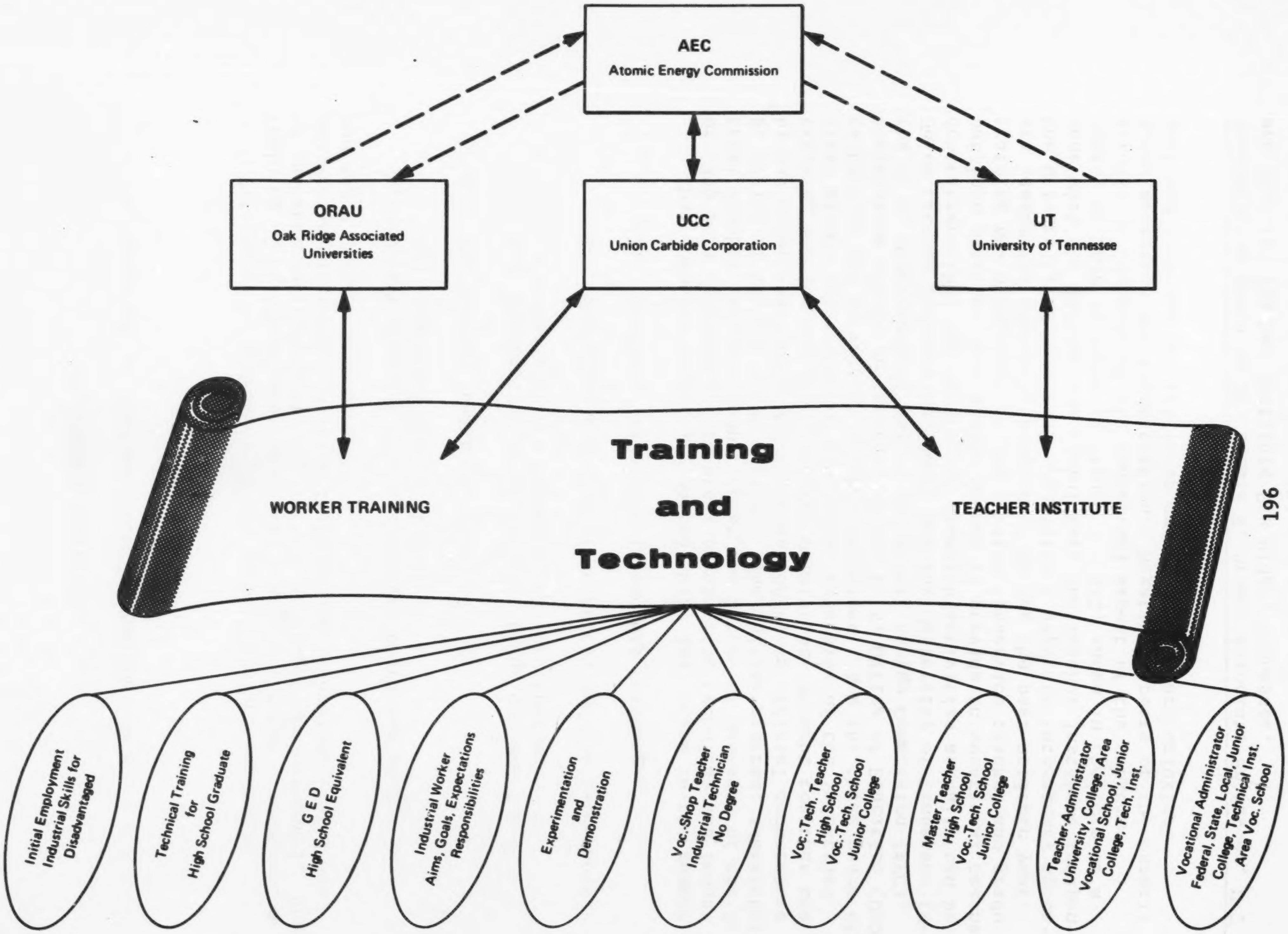
    1. Preparation of prospective technical and T & I teachers in a ladder of careers approach.

    2. Inservice training of technical and T & I teachers.

    3. Graduate leadership internship training.

This industry-university partnership, TAT, began in the summer of 1966 as a research implementation inservice technical and Industrial Teacher Program, supported by the Bureau of Research of the U. S. Office of Education (BR-6-2329). The initial program, administered by Oak Ridge Associated Universities (ORAU) an official cooperative training arm for the Atomic Energy Commission, brought together the vital atomic age tools and equipment, expertise of the industrial technology and university teacher educators. Now the three years of cooperative effort on the part of the U. S. Office of Education (USOE), the U. S. Department of Labor, the Atomic Energy Commission (AEC), Union Carbide Corporation (UCC), and the University of Tennessee (U-T) demonstrate that the results of research activities actually can be put into practice in a viable manner to provide in vocational teacher training new dimensions in pre-service, inservice teacher and graduate leadership education programs. During the past academic year, the University of Tennessee negotiated a separate interagency agreement with the AEC and now administers the Teacher Institute independently of ORAU as shown in Figure 1. TAT, shown in the form of a scroll, is symbolic of the conceptual aspect of the program--Experimentation and Demonstration. Negative aspects of the experiment and evolving are rolled up as new aspects are unfurled.

Presentation given by Dr. Donald V. Brown, Associate Professor, U-T and Director Teacher Institute Oak Ridge, Tennessee.


AEC
Atomic Energy Commission
ORAU
Oak Ridge Associated Universities
UCC
Union Carbide Corporation
UT
University of Tennessee
Training and Technology
WORKER TRAINING
TEACHER INSTITUTE
Initial Employment Industrial Skills for Disadvantaged
Technical Training for High School Graduate
G E D High School Equivalent
Industrial Worker Aims, Goals, Expectations Responsibilities
Experimentation and Demonstration
Voc.-Shop Teacher Industrial Technician No Degree
Voc.-Tech. Teacher High School Voc.-Tech. School Junior College
Master Teacher High School Voc.-Tech. School Junior College
Teacher-Administrator University, College, Area Vocational School, Junior College, Tech. Inst.
Vocational Administrator Federal, State, Local, Junior College, Technical Inst. Area Voc. School

TAT RELATIONSHIPS AND OBJECTIVES

A. THE WORKER TRAINING PROGRAM

During the first two years of TAT, thw Worker Training Program recruits were systematically selected for maximum potential as technical employees. In reality, the cream of the crop from among the applicants were selected for training.

Beginning in June 1968, however, a new concept in recruitment and training evolved and thence the worker trainees have been recruited from among the Appalachian disadvantaged, i.e., with incomes below the poverty line, lacking suitable employment and one of the following criteria: under 22 or over 45 years, member of a minority group, school drop out, or handicapped.[1]

The TAT worker training personnel, consisting of 42% non white, 64% high school drop outs, 4% physically handicapped, etc., indicate the recognition of the Who involvement in vocational education. This paper mentions the worker training program because of the mingling and close association between the personnel in both programs. The sharing of identical machines, laboratory equipment, classrooms, etc., the rapport established among these individuals cannot and indeed should not, be ignored. Also, the manifold opportunities for an informal micro-teaching situation between prospective teachers and the unstructured teaching-learning experiences have become recognized as one of the prime exemplary functions of the teacher preparation. Without the Worker Training Program for the disadvantaged this micro-teaching function would not be feasible. The training of vocational-technical (voc.-tech.) teachers alternately and in direct combination with training about 180 disadvantaged workers in an industrial environment with industry instructors has created a stronger program for both. It is indeed an exemplary model in vocational-technical education today.

B. TECHNICAL AND INDUSTRIAL TEACHER PREPARATION

Teacher candidates for a voc.-tech. teacher training program may be, and indeed have been, recruited from various sources (see Figure 2) such as: Armed Forces, industry, other university departments, technical institutes and high schools. At the Teacher Institute, three years of operation have indicated the high probability of voc.-tech. teacher success of mature veterans and retirees from the U. S. Armed Forces who have one to three years of college credit and a strong vocational or technical experience

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[1] U. S. Department of Labor. Manpower Order #2-68, February 8, 1968.

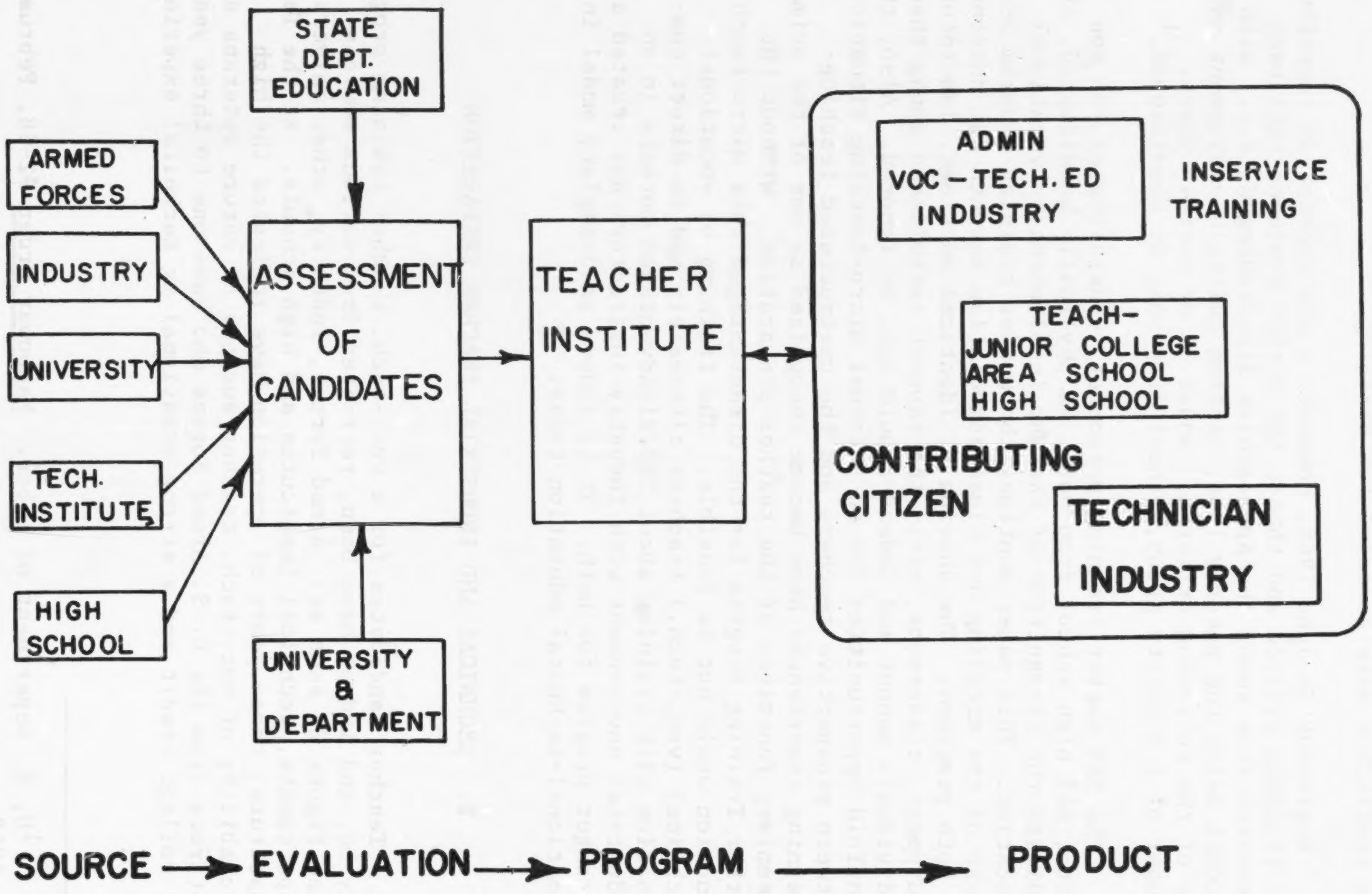
ARMED FORCES
INDUSTRY
UNIVERSITY
TECH. INSTITUTE
HIGH SCHOOL
STATE DEPT. EDUCATION
ASSESSMENT OF CANDIDATES
UNIVERSITY & DEPARTMENT
TEACHER INSTITUTE
ADMIN
VOC - TECH. ED
INDUSTRY
INSERVICE TRAINING
TEACH-
JUNIOR COLLEGE
AREA SCHOOL
HIGH SCHOOL
CONTRIBUTING CITIZEN
TECHNICIAN
INDUSTRY
SOURCE
EVALUATION
PROGRAM
PRODUCT

FIGURE-2

E. ISOM

background. In all fairness it should also be recognized that similar individuals with industrial experience have proved successful as teachers but such individuals are at present difficult to recruit because of (1) salary, level differences between industry and education, (2) pension rights of industrial workers and (3) recruitment knowledge and procedures are not fully developed. Our present research program at the Teacher Institute is making extensive effort to develop recruitment procedures for industry employed prospective voc.-tech. teachers.

As an exemplary model in voc.-tech. education the initial research and demonstration design incorporated wide usage of State Department of Education, Industry and University personnel. One concept of this design involves the joint assessment of prospective teacher candidates before admittance to the Teacher Institute program (see Figure 2). This assessment is made with the realization that the candidates may exit into various fields of endeavor ranging from the industrial technician to an administrative position at college level.

Realities of teacher supply and preparation for vocational and technical teaching positions dictate that careful attention be paid to three major ingredients: personal, technical and professional. These are presented in graphic form in Figure 3, based upon a similar idea by O. Nelson.

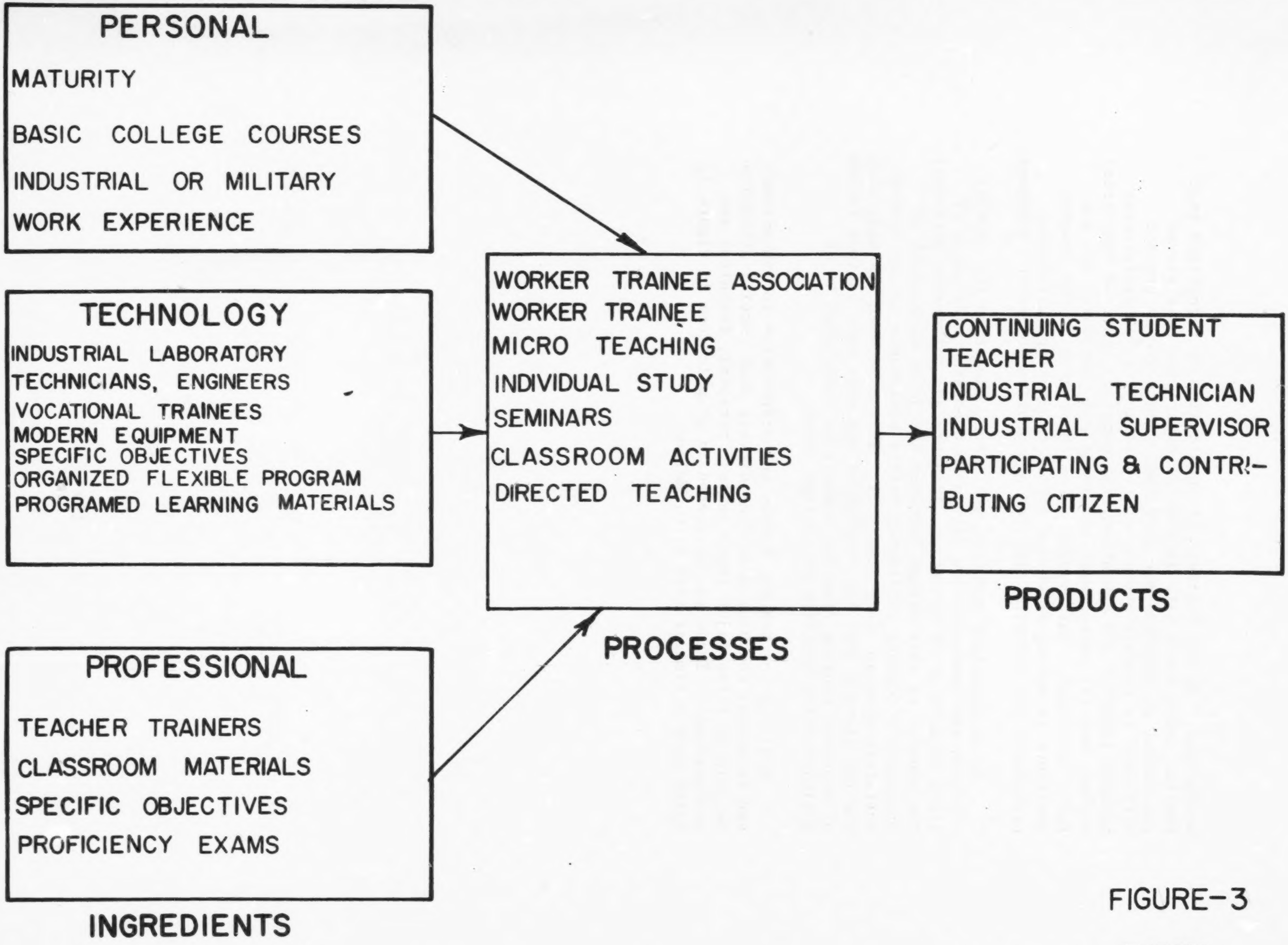
PERSONAL
MATURITY
BASIC COLLEGE COURSES
INDUSTRIAL OR MILITARY
WORK EXPERIENCE
TECHNOLOGY
INDUSTRIAL LABORATORY
TECHNICIANS, ENGINEERS
VOCATIONAL TRAINEES
MODERN EQUIPMENT
SPECIFIC OBJECTIVES
ORGANIZED FLEXIBLE PROGRAM
PROGRAMED LEARNING MATERIALS
PROFESSIONAL
TEACHER TRAINERS
CLASSROOM MATERIALS
SPECIFIC OBJECTIVES
PROFICIENCY EXAMS
INGREDIENTS
WORKER TRAINEE ASSOCIATION
WORKER TRAINEE
MICRO TEACHING
INDIVIDUAL STUDY
SEMINARS
CLASSROOM ACTIVITIES
DIRECTED TEACHING
PROCESSES
CONTINUING STUDENT
TEACHER
INDUSTRIAL TECHNICIAN
INDUSTRIAL SUPERVISOR
PARTICIPATING & CONTRI-
BUTING CITIZEN
PRODUCTS

FIGURE-3

E.ISOM

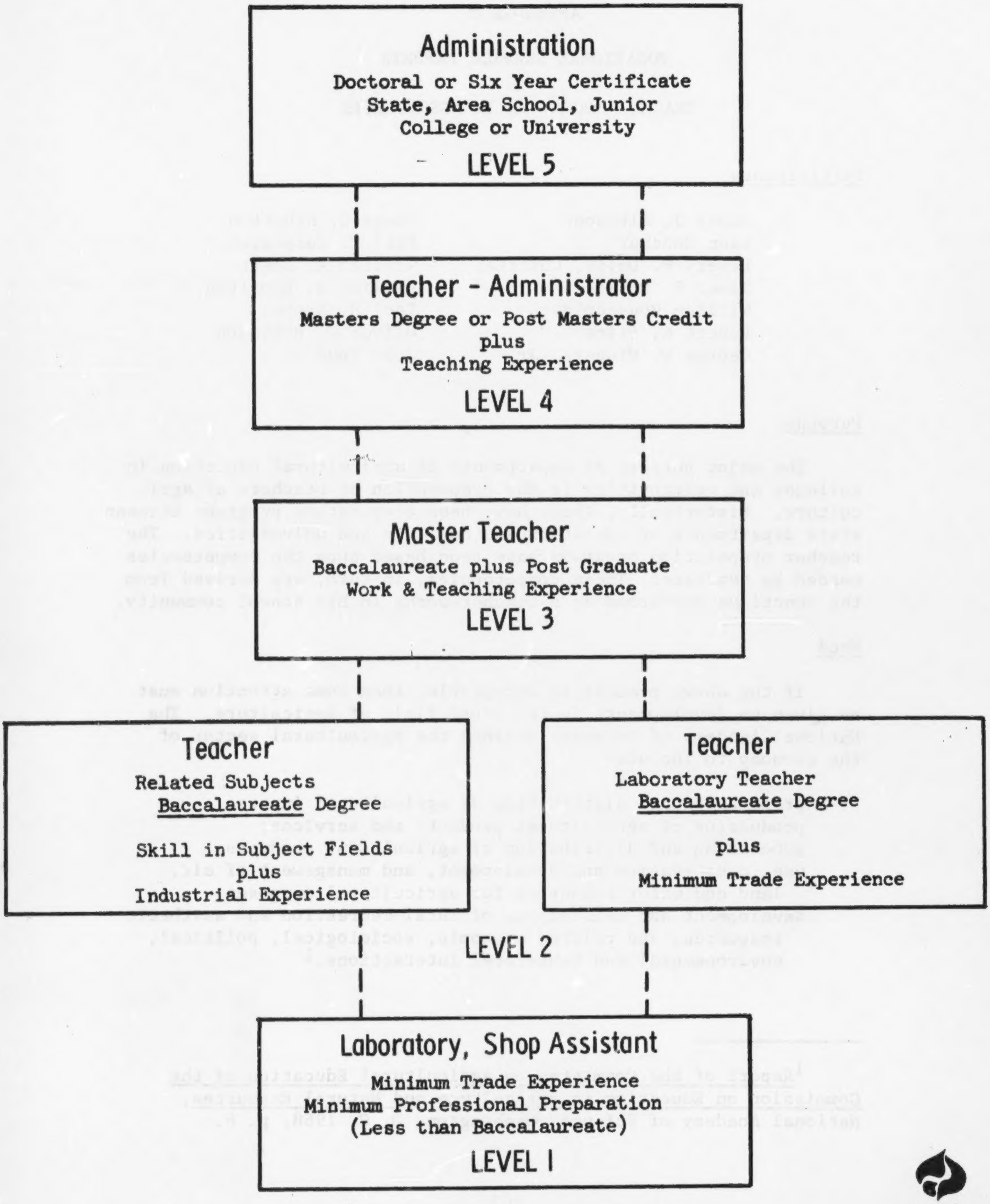
Administration
Doctoral or Six Year Certificate
State, Area School, Junior
College or University
LEVEL 5
Teacher - Administrator
Masters Degree or Post Masters Credit
plus
Teaching Experience
LEVEL 4
Master Teacher
Baccalaureate plus Post Graduate
Work & Teaching Experience
LEVEL 3
Teacher
Related Subjects
Baccalaureate Degree
Skill in Subject Fields
plus
Industrial Experience
Teacher
Laboratory Teacher
Baccalaureate Degree
plus
Minimum Trade Experience
LEVEL 2
Laboratory, Shop Assistant
Minimum Trade Experience
Minimum Professional Preparation
(Less than Baccalaureate)
LEVEL 1

Figure 5

LADDER OF CAREERS IN VOCATIONAL EDUCATION

Don Brown
10/20/69

APPENDIX C

VOCATIONAL SERVICE REPORTS

TEACHER EDUCATION IN AGRICULTURE

Participants

James J. Albracht
James C. Atherton
Leon Boucher
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William N. Hamilton
William Householder
Earl H. Knebel
Robert R. Price
Oliver W. Robinson
George W. Wiegers, Jr.
John Todd

Purpose

The major purpose of departments of agricultural education in colleges and universities is the preparation of teachers of agriculture. Historically, these have been cooperative programs between state departments of education and colleges and universities. The teacher preparation programs have been based upon the competencies needed by teachers. These competencies, in turn, are derived from the functions performed as a teacher works in his school community.

Need

If the above premise is acceptable, then some attention must be given to developments in the broad field of agriculture. The National Academy of Sciences defines the agricultural sector of the economy to include:

> preparation and distribution of agricultural inputs;
> production of agricultural products and services;
> processing and distribution of agricultural products;
> use, conservation and development, and management of air, land and water resources for agricultural purposes;
> development and maintenance of rural recreation and aesthetic resources; and related economic, sociological, political, environmental and behavioral interactions.[1]

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[1] Report of the Committee on Agricultural Education of the Commission on Education in Agriculture and Natural Resources, National Academy of Science, Washington, D. C. 1968, p. 6.

Agriculture, in common with other business and industry, has experienced rapid and continual change. Agriculture is a broad field, of which farming or production is only one phase. Farming, then becomes one of a group of agricultural occupations, with each occupation requiring specific skills and abilities. Production agriculture is the basis from which all other phases of agriculture originate.

Eldon Cully, United States Department of Labor, states:

> With the decline in the number of people engaged in farming, and with the size of farms getting larger and more mechanized, more services must be provided for the farmer. This creates more job opportunities in the field of agribusiness. The chemical, seed, and farm implement companies, and the processing and marketing agencies serving the farmer have offices in areas close to the farmer, providing services he must have to grow his crops or livestock. Large population centers serve as headquarters for financial agencies, cooperatives, food companies, farm implement companies, terminal markets, and processing firms. These firms require qualified personnel to work as clerks, fieldmen, sales personnel, bookkeepers, and executives in plant management. Such personnel must have a working knowledge of agriculture.

A wide variety of new careers are opening up in the manufacture, distribution and servicing of farm machinery, feed, fertilizer, agricultural chemicals, building materials, pharmaceuticals, electrical and electronic products. In the petroleum and LP-gas industries, there is a multitude of new and useful farming applications. New types of trucks, utility vehicles and airplanes are finding their place as tools in farming operations. Food marketing firms need buyers, salesmen, and management trainees. Farm service and supply agencies need accountants, fieldmen and economic advisers. Marketing and purchasing cooperatives, banks and insurance companies need people with business training and a knowledge of agriculture. Opportunities are wide open in floriculture or ornamental horticulture for supervisors, managers, and top salesmen in the florist, landscape management, and nursery business.

Many high school students who could find rewarding careers in professional agriculture are not aware of the excellent opportunities that follow education in a good college of agriculture - the demands for well-educated agricultural specialists in business, education, and government are far above the supply. Nor are agriculture-connected opportunities limited to those with college training. The rising demand for graduates of high schools, junior colleges and technical or vocational institutions bodes well for the future in such specialities as cow testing, artificial breeding, livestock trucking, well drilling, fencing, tilling, crop dusting, sales, machine servicing, feed grinding and mixing, packing, grading, processing, warehousing and the operation of nurseries and greenhouses.

A highly trained, scientifically oriented, technologically skilled labor force is required to support the agribusiness industry in meeting its national and vast international challenge. While a college education is necessary or desirable for many agribusiness occupations, night classes, short courses and on-the-job training are sufficient for many of the technician type jobs available. There are many occupations in which a farm background is advantageous. For those with the right training, the job prospects in agriculture have never been better.

But jobs are going begging for a lack of qualified applicants, and an increasingly critical problem facing the agribusiness industry is the shortage of trained men and women to fill the positions that are open now--and will be open in the future.[2]

Objectives

In view of the changing agricultural scene and in keeping with current legislation, a committee composed of members of the American Vocational Association and the United States Office of Education developed objectives for vocational and technical education in agriculture as follows:

1. To develop agricultural competencies needed by individuals engaged in or preparing to engage in production agriculture.
2. To develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations other than production agriculture.
3. To develop an understanding of and appreciation for career opportunities in agriculture and the preparation needed to enter and progress in agricultural occupations.
4. To develop the ability to secure satisfactory placement and to advance in an agricultural occupation through a program of continuing education.

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[2] Eldon Cully. "Outlook for Employment in Off-Farm Agricultural Occupations." U.S. Department of Labor. Washington, D.C., May 6, 1968 (Mimeo).

5. To develop those abilities in human relations which are essential in agricultural occupations.
6. To develop the abilities needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities.[3]

Curriculum

It is generally agreed a teacher education curriculum should include general education, professional education and subject matter content in the specialized area. General education is defined as that which prepares the young for the common life of their kind and time. Professional education includes study and experience dealing with human growth and development, principles and philosophy of education, principles of learning, materials and methods, and directed teaching. Subject matter preparation is concerned with the application of science to agriculture in the following major areas: plant sciences, animal sciences, agricultural engineering, agricultural economics and the related biological and physical sciences. The need for subject matter preparation is particularly acute in view of the changing agriculture and the fact that agricultural teachers are now teaching in specialized areas, e.g., ornamental horticulture and agricultural mechanics.

Administrative Organization

A sound administrative structure is necessary at the University and state department levels to facilitate pre-service and in-service education of teachers. It is believed this can best be done through a department identified with the subject matter area. The department should have an affiliation with the college of education as well as the college or school responsible for the major field content. There should be comparable persons in the state department of education with whom the programs of recruitment, pre-service and in-service education, instructional materials, etc., would be coordinated. The department should be financed with a well-defined budget with the university and state department each paying a proportinate share.

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[3] United States Department of Health, Education and Welfare, Office of Education. Objectives for Vocational and Technical Education in Agriculture. OE-81011, Bulletin 1966, No. 4, Washington, D. C., 1966.

INTRODUCTION

The Agricultural Education group of the Seminar was composed of representatives from twelve states. The first task of the group was to analyze the presentations heard earlier in the seminar. Points of agreement and disagreement were listed and discussed.

Next, using the presentations and other considerations as a base, the group identified several problem areas. It was recognized that these problem areas were not inclusive of all phases of teacher education in agriculture; all were not of equal scope; and the limitation of time and resources did not permit in-depth exploration.

The problem areas were categorized into four groups. Individuals were assigned to one of these groups according to interest. It was decided that each group's report would not be categorized nor necessarily listed in order of importance. The areas identified were:

1. Pre-service curriculum
2. Certification of teachers
3. Recruitment of prospective teachers
4. In-service education
5. Using behavioral objectives for improving instruction
6. Student-centered teaching
7. Leadership role of professional personnel
8. Accreditation and evaluation
9. Resources for teacher education
10. Kinds of teachers needed
11. Differentiated staffing

The reports follow.

PRESERVICE PROGRAMS AND CERTIFICATION FOR TEACHERS OF AGRICULTURAL OCCUPATIONS

There appears to be three patterns of course offerings for majors in agricultural education. The typical pre-service preparatory program includes common courses in education such as educational psychology; however, the bulk of the courses are taught by the agricultural education staff. Some institutions may offer courses common to all vocational education, such as, principles of vocational education. Another pattern, which is in the minority, includes courses common to education majors, plus specific courses in vocational education plus special courses in the specific service area. This type program encompasses professional preparation in three areas of a college or university. Coordination of subject matter and elimination of duplication are factors to consider when building a pre-professional program.

Agricultural Education Curricula

Review of five recent studies[4] pertaining to agricultural education curricula reveals the course content is distributed as follows:

Basic or general education	33% of the total hours
Professional education	15-20% of the total hours
Technical agriculture	30-45% of the total hours

Agricultural education is demanding increasingly more specialized teachers for more intensive programs in areas such as horticulture, conservation, etc. Colleges are enrolling a greater percentage of students without agricultural background or experiences. Many of these students are interested in teaching agricultural occupations.

A proposed program of teacher education in agriculture at the undergraduate level should encompass more subject matter in agriculture than we have in the present programs. About one-half of the undergraduate requirements should pertain to subject matter preparation in agriculture. One-third should be devoted to basic or general education (which will meet NCATE requirements), and one-sixth to professional education. If this suggested amount of technical education cannot be provided in the undergraduate program, arrangements must be made for an in-service program for teachers where technical competency can be improved.

It is recommended that orientation or exploratory experience be provided in the undergraduate program in reaching students with special needs. The teacher preparation courses relating to students with special needs should be taught by specialists in that discipline. Most teacher specialization in the area of students with special needs will probably occur at the graduate level rather than in the undergraduate program. If flexibility of program requirements is provided undergraduates they should be encouraged to use some of the electives to prepare themselves to be more efficient with students with special needs.

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[4] George W. Wiegers. The Curriculum: Professional Education (in Teacher Education In Agriculture, ed. V. R. Cardozier. Danville: The Interstate Printers and Publishers, Inc., 1967). pp. 179-182.

Some institutions are offering specialized programs such as ornamental horticulture, conservation, etc., for teachers wanting to specialize in a particular area. These programs generally contain enough technical content to qualify for a major in that specific department. Agricultural education majors preparing for a special area need the flexibility of course requirements to achieve a double major.

Because prospective teachers come from diverse backgrounds, the agricultural courses must provide experiential learning situations. Skills and abilities must accompany the theory in the agricultural courses at the undergraduate level.

If the skills and abilities cannot be provided in the college academic program, departments should provide intern programs or summer experiences supporting the specialized area.

Certification

There appears to be one classification of teaching certificate for teachers of vocational agriculture completing the baccalaureate. The approved program approach is used in nearly all the states. The practice of the institution recommending a body of courses for certification and the state certification agency reviewing and approving the program appears to be meeting the needs of the states.

Endorsement in special areas such as horticulture is suggested as one approach to special certification. Some arrangement, such as endorsement, needs to be identified for specially prepared personnel.

A study of certification requirements for teachers of vocational agriculture, in thirteen Southern states,[5] reveals the professional education and agricultural requirements for certification are identical to what the colleges require for graduation. The median state certification requirement consisted of 17 percent of the curriculum, or 23 semester hours of professional education and 41 percent of the curriculum and 55.3 semester hours of agriculture.

Guidelines for Implementation

We believe agricultural education needs a strong undergraduate program with professional courses taught by personnel experienced in vocational education. A coordinated program of technical agriculture courses should be provided agricultural education majors. Flexibility of course requirement to supplement and complement individual differences should be a characteristic of the program.

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[5] John Todd. "Trends in Teacher Certification in Vocational Agriculture", Paper presented to Southern Region Agricultural Education Conference, April, 1968. 7 pp.

BEHAVIORAL OBJECTIVES

Present Situation

Well-defined, measurable goals have been characteristic of instruction in classes in vocational agriculture for many years. Such objectives as to develop the ability of individuals to produce 100 bushels of corn per acre or 320 eggs per hen per year have been the basis for much worthwhile instruction. New programs are being developed for a variety of agricultural occupations and there is a need for sets of goals which are attainable and can be measured to guide teachers in directing the learning process. Present and prospective teachers need assistance in the preparation and use of materials for this purpose.

Projection

Recent work with behaviorial objectives is showing promise for improving instructional efficiency. This work involves deciding upon clear, concise, measurable goals based upon the behavior desired on the part of the learner and developing learning packages to be used by groups and individuals in attaining the desired levels of proficiency.

It is proposed that such a procedure is a realistic way to organize the program of teacher education in agriculture. Desired levels of teacher competency need to be established and interpreted into clearly defined objectives, and learning materials need to be developed for the complete program.

Implementation

A national project needs to be designed and funded to develop a comprehensive package of learning materials based on behaviorial objectives for the preparation of agriculture teachers.

A similar project should be designed and funded to develop objectives and materials for use by teachers of vocational agriculture in their classes. The initial effort should be concerned with those types of programs widely offered across the nation.

It is essential that pre-service and in-service education of teachers include experience in development and use of such materials.

RECRUITMENT OF PROSPECTIVE TEACHERS OF VOCATIONAL AGRICULTURE

There is a shortage of certified and qualified teachers of vocational agriculture which is becoming more serious in spite of extensive recruitment efforts which have been exerted recently. Woodin,[6] after surveying all of the state supervisors of agricultural education, found that 232 teaching positions were not filled in 1967 because satisfactory applicants were not available. Another 242 teachers were holding positions under temporary or emergency certificates.

In addition to the shortage of teachers for production agriculture programs, many others will be required for emerging programs of agricultural occupations and for working with students having special needs.

Projections

An adequate supply of teachers must be provided to meet demands for production and related types of specialized programs in agriculture. Increased needs for teachers are expected for production and specialized programs in agriculture at the high school, post high school, and adult levels of instruction. In Woodin's study,[7] a projected need was found for 1,027 new positions in 1970. As a result of new legislation, even more teachers will be required for special programs to meet individual needs of students.

Implementation

The extensive demand for additional teachers necessitates increased recruitment activity at national, state, and local levels. Past efforts of land grant colleges and of the A.V.A. have been extensive, but new and more successful approaches must be found. The assistance of guidance counselors, alumni associations, department of education personnel, vocational agriculture teachers, agricultural college administrators and faculty, college students, and local agricultural leaders must be sought.

A number of activities have been used in some states with considerable success. Some of these are career days, opportunity breakfasts, exhibits, teacher of teacher awards, individual contacts with prospective students and their parents, counselor days, varsity visits, alumni recruitment activities, and campus visitations.

Serious efforts must be made to solicit scholarships and other financial support for teacher candidates. Just as industry is willing to pay for the development of their workers, vocational education must find ways to support young men needed in the teaching profession.

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[6] Ralph J. Woodin. "Supply and Demand For Teachers of Vocational Agriculture In The United States for the 1966-67 School Year." Staff Study, The Ohio State University, Columbus, Ohio. (Mimeo.)

[7] Ibid.

That previous recruitment efforts have not been sufficiently successful is evidence of the need for extensive research to find improved recruitment techniques. The important place of parents in career decision making has been well established by research. Efforts need to be made to find out how to give parents the story of careers in teaching vocational agriculture.

Adequate working relationships should be established and maintained between teacher education institutions and other institutions of higher learning which might offer the first years of the college program. Attention needs to be given to the coordination of course offerings and to otherwise facilitate the transfer of such students.

STUDENT-CENTERED TEACHING

Present Situation

Teachers of vocational agriculture have traditionally conducted student-centered courses. Much of their instruction has been on a small group or individual basis. However, recent efforts to meet current needs have caused many programs to be shifted from farm-based instruction to basic subject matter in the life sciences as a prerequisite to advanced occupational course work. Individualized instruction is more difficult to achieve in the foundational program of the basic sciences. The great diversity of occupational opportunity in the agricultural complex and the special demands of various endeavors require that the individual be prepared in a specified area for job entry.

Projection

The 1963 Vocational Education Act, its 1968 amendments and the long standing philosophy of vocational agriculture programs have created a mandate that educational programs shall be tailor-made to revolve around the interests and needs of individual students rather than place emphasis upon subject matter content. Therefore present and prospective teachers must be prepared to initiate and conduct such programs successfully.

Implementation

To prepare teachers to accommodate individual needs of students requires new techniques in pre-service and in-service programs. It is essential that persons with special expertise be utilized in the preparation of learning packages for individual students in the undergraduate education courses. Teacher educators must demonstrate the value of individualized instruction in teaching their classes.

Student teachers should be required to conduct case studies of individual students and then use them in a real life class situation to determine individual needs. Since many of the needs of a student are highly specialized, the student teacher should be taught to use resource persons to provide specific information. The use of such persons by the teacher educator in his classes would serve the dual purpose of providing needed information and of setting an example to be emulated.

TEACHER EDUCATORS IN AGRICULTURE

I. Leadership Roles in Teacher Education

Present Situation

1. The leadership for agricultural education in the U. S. Office of Education and state departments of education has been diluted, and staff assigned responsibilities other than those necessary for maintenance of agricultural and teacher education.

2. State plans for vocational education appear to be following patterns established by guidelines and directives from the Office of Education that further de-emphasize the importance of specialists to serve the interests of the various fields of service.

3. The decentralization and de-emphasis of leadership for agricultural education at the national and state levels is causing both concern and confusion in the profession.

4. Professional organizations and associations are assuming a more aggressive role in leadership in agricultural education.

5. Individuals are being appointed to serve in roles of administration and supervision of vocational education programs in agriculture who lack the academic preparation and occupational experience in agriculture to lend leadership to the field.

Projections

1. Teacher educators in agricultural education must assume a unified, aggressive leadership role in re-establishing leadership in the Office of Education vital for planning, evaluating, and research in agricultural education.

2. Agricultural teacher educators must be employed in advisory and consultative positions and they must work closer with and support the efforts of Regional and National Centers for Research in the design and development of programs for teacher education.

3. Programs of in-service education must be developed and implemented that will upgrade teacher educators in the broader and/or more specialized aspects of agricultural education and to serve the needs of prospective teachers who will work with students with special needs.

4. Teacher educators must accept the responsibility of preparing teachers for the post secondary positions, local, regional and state directors, supervisors, coordinators, counselors and researchers for vocational education.

5. Teacher educators will accept the leadership challenge to prepare teachers with the competencies needed to work with the disadvantaged, whether it be an academic, socioeconomic, or other handicap.

II. Resources for Teacher Education in Agriculture

Present Situation

1. While limited use is being made of industrial and commercial resources in the teacher education process, the identification and utilization of all of the resources available for teacher education in agriculture should be expanded.

2. It is believed that research projects for the specific needs in agricultural teacher education have not been adequately supported.

3. Increased emphasis must be placed by teacher educators in agriculture towards utilizing all of the services available from the institutions in preparing teachers.

4. It is recognized that many of the resources being used by vocational education services could serve more than one vocational group.

5. Advisory councils for teacher education in agriculture are not being used extensively.

Projections

1. Teacher educators in agriculture should make greater use in their education programs of the resources that are available from industry and in the community to provide supervised occupational experience for the students in their programs.

2. Resources, particularly funds, should be available for research in problem areas of agricultural teacher education--instructional media, differentiated staff, internships, teacher aides, etc.

3. Increased emphasis will be given towards advisory councils for teacher education composed of individuals that are working in or are influenced by vocational education in agriculture--teachers, agricultural businessmen, etc.

4. Attention will be given to increased coordination and cooperation among the various vocational teacher education services.

III. Evaluation and Accreditation

Present Situation

1. Evaluation of teacher education programs have been generally limited to a few follow-up studies, self evaluation and formal evaluations by professional accreditation agencies (NACTE).

2. Self appraisals have been made through joint efforts of state departments of vocational education, colleges of agriculture and agricultural education staffs.

Projections

1. Increasing attention will be given to evaluation as a continuing process in teacher education in agriculture.
2. Systematic long-range evaluation processes will be used as research is developed to design and plan programs of evaluation utilizing modern data processing techniques.
3. There will be increased attention given to coordinating research programs in an organized effort to develop evaluative criteria for innovative programs of teacher education.
4. Allocation of funds and resources for teacher education in agriculture will be based on the results of long-range and systematic evaluation of teacher education programs.

Implementation of Teacher Education Projections

1. Continue to support and encourage the efforts of the professional associations, agricultural associations and organizations working to improve the staffing of specialists for vocational education in agriculture in the U. S. Office of Education.
2. Work with state teachers groups, state departments of vocational education and vocational education advisory committees in the promotion and development of state, regional and national leadership for vocational education in agriculture.
3. Maintain a continued interest in and an understanding of federal vocational education legislation.
4. Develop closer coordination among the various vocational services, professional associations and teacher education institutions in an effort to develop realistic evaluative instruments for the evaluation of teacher education programs by regional and national accrediation agencies.

IN-SERVICE EDUCATION FOR VOCATIONAL AGRICULTURE TEACHERS

Dr. James Wattenbarger, in his presentation to the seminar, suggested as an action step "providing teachers with tools for self-renewal." He further stated that in-service development of teachers is an area in which little research has been done. The need for in-service development is apparent; the best means of achieving this goal is a subject of debate. The following is a view of the present situation, anticipated or predicted trends and changes, and suggested courses of action pertaining to the in-service education of agriculture teachers.

As used here, in-service education refers to that knowledge and those skills, contributing to the professional competence of the teacher, which are learned subsequent to initial professional employment and while continuing in this role.

Present Situation

There are many types of in-service training activities to which the vocational agriculture teacher may avail himself, including:

1. Beginning teacher courses.

2. Summer session courses of three and four weeks' duration.

3 Extension courses during the academic year. Such courses are usually offered only when a requisite minimum enrollment can be obtained for a given attendance center. Lack of the required minimum enrollment is often a handicap to specific individuals desiring training.

4. One-day clinics or workshops of various types:
    a. State department of education sponsored; area or statewide; attendance compulsory.
    b. Group initiated and planned; voluntary attendance.

5. Commercially sponsored instructional programs such as Lincoln's welding course.

6. Area and state professional meetings.

7. On-the-job instruction of individual teachers by the state supervisors or the university teacher educators who visit the teacher in his school on routine or special request visits.

8. Self-instruction. This is often a very important type of in-service training to a highly motivated individual.

Just as there are several types of in-service training activities, there are also many types or classifications of personnel responsible for providing or supporting in-service training for agriculture teachers. Primary responsibility for providing leadership for developing programs in, and coordinating the in-service training of vocational agriculture teachers rests with the following groups:

1. University teacher educator staff and

2. State supervisory staff.

Others who contribute to the in-service education include:

3. University college of agriculture personnel.

4. Other university specialists.

5. Various service agencies such as Vo-Ag Service in Illinois and American Association for Agricultural Engineering and Vocational Agriculture.

6. Representatives of commercial companies.

7. Experienced or master teachers who serve as models for the younger or less experienced teacher.

8. Various resource persons within the community: professionals in agricultural occupations such as soil conservationists, extension specialists, and veterinarians; leaders in agricultural businesses; outstanding farmers; etc.

Even though there appears to be a wide variety of opportunities for in-service development, in-service education of agriculture teachers requires increased emphasis for these reasons:

1. The production agriculture orientation of the vocational agriculture curricula tends to persist. This indicates a need for in-service education to provide the technical and professional competence to implement change leading to more training for off farm agricultural occupations.

2. Some teachers do not avail themselves of in-service training and are therefore less motivated and perhaps technically unprepared to change to meet existing demands of vocational education in agriculture.

3. Graduate courses and/or programs do not always meet the needs of teachers who require technological up-grading due to differences between the objectives of the graduate programs and the in-service training needs of the teacher.

4. The educational needs of the disadvantaged are not being met.

Anticipated or Predicted Trends and Changes

In-service education should be a continuing process which has as its goal the same objective currently being promoted for all of vocational education, namely, the development of the whole self. It should focus on individual needs and interests.

At least two factors are now operating which are changing the in-service training needs of agriculture teachers. As the training for off-farm agricultural occupations increases, agriculture teachers will need to become informed in the knowledge and skills of the occupations. Also as agriculture programs are enlarged to provide training in more areas and to provide special services to the handicapped, more multiple-teacher departments will be formed. School district consolidation and reorganization will also contribute to the formation of more multiple-teacher departments. These multiple-teacher departments will lead to differentiated staffing with the individual teachers concentrating on certain specialities. The two factors seem to lead in opposite directions; the one calling for further generalization in the in-service training, the other suggesting specialization. This apparent contradiction presents a challenge to the teacher educator who is charged with developing in-service training.

There are some current trends which, if continued, will seriously weaken the existing in-service training of agriculture teachers. These trends include:

1. The amalgamation of departments into a general vocational department.

2. The loss of the services of identified area, state, and national supervisors.

3. A reduction in the number of teacher educators.

To compensate for the loss of in-service training potential caused by the foregoing, other resources must be sought. College of agriculture personnel must become more heavily involved in providing experiential in-service training of teachers.

The FFA is vulnerable to change. Because of the name and the expanded concept of vocational agriculture, the FFA in its traditional form does not meet the student organization needs of all vocational agriculture students. As change in the familiar patterns and activities become apparent, teacher educators will have a responsibility to help teachers and student leaders explore alternatives. Herein lies considerable opportunity for innovation.

Graduate credit programs will continue to be an important source of in-service training due to the motivation (or pressure) from certification agencies and salary schedules. Teacher educators will have a responsibility to develop and coordinate graduate programs in agriculture and agricultural education which will meet in-service professional development objectives as well as provide the desired graduate credit. A possible innovative thrust in in-service education at the graduate level will be courses which provide for summer internships to give experience and training in off-farm occupations. Such programs should be encouraged. Because of the limitations of graduate credit programs, and the lack of further interest in graduate programs of some teachers, supplemental in-service training must continue to be provided in such forms as short courses, day clinics and personal consultation.

Recognizing that the need for professional training will persist, emphasis for in-service training will concentrate more heavily on the technological skills and knowledge of agricultural occupations.

Suggested Course of Action

In the introduction, a reference was made to Dr. James Wattenbarger's contention that "we do not know enough about in-service training" and that "there is a need for more research in the area of in-service training." If vocational agriculture teachers are to change to meet the existing challenges in vocational education for agricultural occupations, it is apparent that more research and pilot programs will need to be developed.

In developing these programs there is evidence of a need for greater coordination of effort and cooperation among the groups which share the responsibility of leadership for in-service education. A statewide committee composed of members of the state supervisory staff, members representing each of the teacher education institutions within the state both professionals and subject matter specialists and representative in-service teachers is an important approach to developing significant research and innovative pilot programs. Such an approach appears to be imperative if vocational education is to develop programs that will meet the challenge of providing programs which are relevant to the needs of all youth, especially to those which are currently referred to as the disadvantaged.

In-service training can and will provide for the necessary professional development of the teachers in the field if adequate support is provided to this end. The in-service training of agriculture teachers of the past which kept them abreast of the changes in agriculture as farming advanced into its present mechanized and technological state is evidence that in-service training can serve this important function. The only question at this point is, "Will adequate support, cooperation, and effort continue to be provided which will promote this important function of professional development?"

BUSINESS EDUCATION

Participants

Annelle Bonner	Robert Comfort
John Devine	Duane Ewer
Earl Halvas	William Pasewark, Chairman
Richard Peterson	Alfred Patrick, Co-Chairman
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George Wagoner	Bertha Wakin

Introduction

The objective of the business education group was to develop a profile of selected areas for the preparation of business educators who have responsibility for orienting students to the world of work and for preparing youth and adults for entry-level office positions.

Group discussion indicated recognition of the need to state competencies which a business teacher should have; however, due to the short period of time this group could meet and the extremely large number of competencies which would have to be developed, this group decided that it would not be practicable to try to develop a complete list of competencies necessary for business teachers. This should be done, however, by some group or groups; our group felt that all requirements for the preparation of business teachers should be stated in terms of what competencies are necessary--not on the basis of the amount of work experience or number of hours of college courses in particular areas.

The business education group decided to concern itself with selected curricula components and instructional methods and media which deserve increased attention in the preparation of educators. Many of the curricula components and instructional methods and media have been in use throughout the years in some places, but they have not been and are not now being as widely used or heavily emphasized as they should be.

The areas considered in this report are not meant to be all-inclusive; they are only some of those educational issues which have recently emerged or which have been under-emphasized in the past. The work of this group should be considered as a base from which educators can expand and enlarge areas which they feel need more attention.

What does this report do? (1) It identifies important curricula components for modern business education. (2) It indicates many groups of professional and para-professional persons who contribute to the education of students.

Curricula Components, Methods, and Media

In Table I are shown selected emerging or under-emphasized curricula components, desired levels of competencies for these components, and an indication of which agencies are responsible for developing these components in specified categories of educators. The number in a column for a category of educator represents the desired level of competence as explained by footnotes on page 222 of Table 1. The capital letter or letters following the number in each column indicates the agency primarily responsible for developing the competency; cooperating agencies are indicated by the small letter or letters. The superior numbers following some of the components refer to footnotes which explain the meaning of the terms (the components).

In Table II are shown selected curricula components with methods and media which could be used to teach each component.

Table 1. EMERGING UNDER-EMPHASIZED CURRICULA COMPONENTS; DESIRED LEVEL OF COMPETENCY, AND AGENCIES RESPONSIBLE FOR DEVELOPING THESE COMPONENTS IN SPECIFIED EDUCATORS

CURRICULA COMPONENTS (a)	T E A C H E R S									OTHER EDUCATIONAL PERSONNEL			SUPERVISORS		NON-EDU'L PERSONNEL
	Elem	Jr. High	High Sch.	Jr Col Tchrs.	Tech. Educs	Special Pro. (b)	Voc. Rehab	Voc. Techn.	Private Bus Sch	Tchr. Aides	Guid. Coun.	Voc'l. Edu Adm	City	State	Edu'l. Dir. in Business
ADMINISTRATION & SUPERVISION															
Budget	1c	1c	3Ecd	2Ecd	3ECB	3Ecd	2ECD	2Ecd	2Ecd	0	1E	3E	3Ecd	3BDE	3Ae
Dept. Management	1c	1c	2Ec	2Ecd	3Ec	2Ec	2Ec	2Ec	2Ecd	0	1E	3E	3Ecd	3BDE	3AE
Differentiated ← Staffing	1c	1c	2Ec	2E	3E	2Ec	2Ec	2Ec	2E	0	1E	3E	3Ecd	3BDE	3AE
Faculty Self-Eval	2Ecd	2Ecd	2Ecd	2Ecd	3Ecd	2Ecd	2Ecd	2Ecd	2Ecd	0	1Ecd	3E	3Ecd	3BDE	3A
Fed. & St. Edu. Legislation	1Ec	1Ec	2CDE	2CDE	3CDE	2CDE	2CDE	2CDE	2CDE	0	2CDE	3DE	3CDE	3ECDE	3A
Planning facils.	2Ec	2Ec	3Ec	3Ecd	3Ecd	2Ecd	3Ecd	3Ecd	3Ecd	0	1Ecd	3E	3Ecd	3BDE	3Ac
Public Relations	2Ec	2Ec	3Ec	3Ec	3Ec	3Ec	3Ec	3Ec	3Ec	1C	3Ec	3E	3Ecd	3D	3A
Research/Experimentation	2Ec	2Ec	bc 3DEa	bc 3DEa	bc 3DEa	3BDEac	c 3BDE	3BDEac	3BDEabc	OC	bc 3DEa	3E	3Ecd	3ED	3AE
Supervisory Eval.	3Ecd	3Ecd	3Ecd	3Ecd	3Ecd	3Ecd	3Ecd	3Ecd	3Ecd	3C	3Ecd	3E	3Ecd	3ED	3Ac
SPECIALIZED LEARNING															
Action Learning	3E	3E	3E	3E	3E	3E	2E	3E	3E	1C	2Ec	2E	3E	2E	3E
Block-time Inst.	3E	2E	2E	2E	3E	2E	2E	2E	2E	OC	2Ec	2E	3E	2E	3E
Experimental Learning	3E	3E	3E	3E	3E	3E	3E	3E	3E	1C	2Ec	2E	3E	2E	3E
Group Dynamics	2E	2E	3E	3E	3E	3E	3E	3E	3E	1C	3Ec	2E	2E	2E	3E
Independent Learning	2E	3E	3E	3E	3E	3E	3E	3E	3E	2C	3Ec	2E	3E	2E	3E
Individualized Learning	3E	3E	3E	3E	3E	3E	3E	3E	3E	2C	2Ec	2E	3E	2E	3E
Instru. Media	3E	3E	3E	3E	3E	3E	3E	3E	3E	3C	2Ec	2E	3E	2E	3E
Interdisciplinary Units	3E	3E	3E	3E	3E	3E	2E	3E	3E	2C	2Ec	2E	3E	2E	3E
Large group inst.	2E	2E	3E	3E	3E	1E	1E	2E	2E	2C	2Ec	2E	3E	2E	3E
Orient. to DOT	0	1E	3E	3E	3E	3E	3E	3E	3E	1C	3E	3E	3E	3E	3E
Simulated Labs	0	1E	3E	3E	3E	3E	2E	3E	3E	1C	1Ec	3E	3E	3E	3E
Team Teaching	3E	3E	3E	3E	3E	3E	2E	3E	3E	2C	2Ec	2E	3E	2E	3E
Unitized Instru.	3E	3E	3E	3E	3E	3E	3E	3E	3E	2C	2Ec	2E	3E	2E	3E
Youth Organiza.	0	1E	3Ed	3Ed	3Ed	3E	2E	3Ed	3Ed	1C	3Ec	2E	1E	2E	3E

Table 1. EMERGING UNDER-EMPHASIZED CURRICULA COMPONENTS, DESIRED LEVEL OF COMPETENCY, AND AGENCIES RESPONSIBLE FOR DEVELOPING THESE COMPONENTS IN SPECIFIED EDUCATORS (Continued)

	T	E	A	C	H	E	R	S	OTHER EDUCATIONAL PERSONNEL				SUPERVISORS		NON-EDU'L PERSONNEL
CURRICULA COMPONENTS (a)	Elem	Jr. High	High Sch.	Jr Col Tchrs.	Tech. Educs	Special Pro. (b)	Voc. Rehab	Voc. Techn.	Private Bus Sch	Tchr. Aides	Guid. Coun.	Voc'l Edu Adm	City	State	Edu'l. Dir. in Business
SPECIAL NEEDS															
Handicapped Persons															
Culturally	3Ed	3Ed	3Ed	3Ed	3Ed	3Eabed	3Ed	3E	3E	2C	3Ed	3E	3E	3BDE	3Ea
Economically	3Ed	3Ed	3Ed	3Ed	3Ed	3Eabcd	3Ed	3E	3E	2C	3Ed	3E	3E	3BDE	3Ea
Intellectually	3Ed	3Ed	3Ed	3Ed	3Ed	3Eabed	3Ed	3E	3E	2C	3Ea	3E	3E	2BDE	3Ea
Physically	2Ed	3Ed	2Ed	2Ed	3Ed	3Eabcd	3Ed	2Ea	2E	2C	3Ed	3E	2E	2BDE	3Ea
ORIENTATION TO WORK															
Adaptation to Tech. Society	3E	3Ea	3Ea	3Ea	3Ea	3Eab	3Ed	3Ea	3Ea	1C	3E	3EA	3E	2Ea	3Ea
Attitude Level	3E	3Ea	3Ea	3Ea	3Ea	3E	3E	3E	3E	2C	3E	3EA	2E	3Ea	3EA
Guidance	2E	2E	2E	2E	3E	2E	3E	2E	2E	1C	3E	2E	2E	3EA	2EA
Human Relations	3E	3E	3E	3E	3E	3E	3E	3E	3E	2C	3E	3E	3E	3EA	3Ea
Self Motivation	3E	3E	3E	3E	3E	3E	3E	3E	3E	3C	3E	3E	3E	3EA	3EA
Student Eval. by Faculty	3E	3E	3E	3E	3E	3E	3E	3E	3E	1C	3E	3E	2E	3EA	2EA
OTHER															
Adult	0	0	2Ecd	3Ecd	3E	3Eac	3Ed	3Ecd	3Eac	0	2Ec	3Ed	3Ed	3EA	3Ecd
Coop. Wk. Exp.	0	1C	3Ecd	3Ecd	3Ea	3Eac	2Ed	3Ecd	3Eac	1C	2Eac	2Eac	3Edc	3EA	3Ecd
Post Second	0	0	2Ecd	3Ecd	3E	3Eac	2Ed	3E	3Eac	0	2Ea	3Ea	3E	3EA	3Ecd
Urban	3E	3E	3Ecd	3BCDE	3E	3Ec	3Ed	3E	3Eac	2C	3Ec	3Ec	3E	3EA	3Ecd
Internship	2Cd	3Cd	3Ec	3Ec	3Ec	3Ec	2Ed	3E	3Eac	0	2E	3Ec	3ED	3EA	3Ecd
Tchr. Bus. Exp.	0	0De	3Ea	3EA	3Ea	3Ea	2Ed	3Eac	3Eac	1C	2E	3Ed	3Ed	3EA	3Ecd

Table 2. SELECTED INSTRUCTIONAL METHODS AND MEDIA

CURRICULA COMPONENTS	METHODS AND MEDIA																			
	Audio Tapes	Block Time	Buzz Sessions	Committees	Computer-assisted Instruction	Controlled Reader	Demonstrations	Field Trips	Filmstrips	Guest Speakers	Learning Labs.	Lecture-Discussion	Library Resources	Motion Pictures	Multiple Listening Stations	Projectors	Programmed Instr.	Team Teaching	Television	Video Tape
ADMINISTRATION AND SUPERVISION																				
Budget			✓	✓			✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓
Dept. Management	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓		✓		✓		✓
Differentiated Staffing			✓	✓			✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓
Faculty Self-Evaluation	✓		✓	✓			✓		✓	✓		✓	✓			✓				
Federal & State Educational Legislation	✓		✓	✓						✓		✓	✓			✓		✓		✓
Planning Facilities and Equipment	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓
Public Relations	✓		✓	✓			✓	✓	✓	✓		✓	✓			✓		✓	✓	✓
Research Experimentation			✓	✓			✓	✓		✓	✓	✓	✓			✓	✓			✓
Supervisory Evaluation			✓	✓			✓	✓		✓		✓	✓			✓		✓		✓
SPECIALIZED LEARNING																				
Action Learning	✓		✓	✓			✓	✓	✓		✓			✓				✓	✓	✓
Block-Time Instruction	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓			✓	✓	✓		✓
Experimential Learning	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Group Dynamics	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓			✓		✓	✓	✓
Independent Learning	✓	✓	✓	✓			✓		✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
Individualized Learning	✓	✓	✓	✓			✓		✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
Instructional Media	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
Interdisciplinary Units	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓			✓		✓	✓	✓
Large Group Instruction	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓
Simulated Labs.	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓
Team Teaching	✓		✓	✓			✓	✓	✓	✓		✓	✓			✓		✓	✓	✓

Note: In this table are shown the instructional methods and media used in teaching the various components within the vocational business-teacher curricula.

Table 2. SELECTED INSTRUCTIONAL METHODS AND MEDIA (Continued)

CURRICULA COMPONENTS	METHODS AND MEDIA																			
	Audio Tapes	Block Time	Buzz Sessions	Committees	Computer-Assisted Instruction	Controlled Reader	Demonstrations	Field Trips	Filmstrips	Guest Speakers	Learning Labs.	Lecture-Discussion	Library Resources	Motion Pictures	Multiple Listening Stations	Projectors	Programmed Instr.	Team Teaching	Television	Video Tape
SPECIAL NEEDS																				
Handicapped Persons	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ORIENTATION TO WORK																				
Adaptation to Technical Life	✓	✓	✓				✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓
Attitude Development	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Guidance	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Human Relations	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Student Evaluation			✓	✓			✓		✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
OTHER																				
Adult	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Cooptv. Work Exp.	✓		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Post-Secondary	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Urban	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Internship	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Teacher Business Experience		✓	✓	✓			✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓

Note: This table shows the instructional methods and media used in teaching the various components within the vocational business teacher curricula.

Implementation

In spite of the fact that business educators have known about most of these components and have been aware of their potential in business education, as a rule we have not implemented them in our educational programs. We are urging that implementation of these components be undertaken with renewed interest, enthusiasm, and concern. It is likely that the greatest problem connected with this report will be its implementation.

The complexities and variety of curricula components in business teacher education create many problems for actual implementation of these components. These can be classified in two major categories: (1) Disseminating information about the components so all business educators know about them. (2) Presenting procedural strategies for actual implementation.

Disseminating Information

1. Publications

    a. U. S. O. E. report of this seminar
    b. Articles written in various journals (AVA, JBE, DPE, NEA, Phi Delta Kappan, Business Education Forum, NASSP, state magazines, house organs, local bulletins, university publications, newsletters).
    c. Reports to state departments of education
    d. Yearbook publications
    e. Publications of the Center for Vocational and Technical Education
    f. The ERIC system

2. Meetings

    a. Conventions, topics for national meetings
    b. Regional
    c. State (business teachers and business teacher educators)
    d. County
    e. Local institutions, departmental meetings
    f. Area vocational leaders' meetings

3. Workshops/Seminars

    a. Give overviews through group meetings
    b. Sessions devoted to particular components
    c. In-service programs
    d. Credit classes through the universities
    e. Where joint meetings can be held, alternate joint meetings and special areas

4. Integrate into our own methods classes in our teacher education programs (graduate, undergraduate--pre-service, in-service), and incorporate components and use methods and media with existing content courses.
5. Personal contact, talking about these with teachers on a person-to-person basis.

Procedural Strategy

1. Gain cooperation of school administrators
2. Convince the faculty of the value and appropriateness of components so the faculty can determine priorities.

   In order for the suggestions in this report to be implemented, the faculty must recognize the desirability of implementing it. How do you convince the business educators of the desirability of these components, methods and media? A few possibilities are:

   a. Bring in local school people to work with college faculty on special problems or projects.
   b. Have business teacher educators serve on advisory committees to local schools.
   c. Visit local schools and work with teachers in those schools.
   d. Allow faculty to select components which they want to give attention to during the year; get the faculty involved.
   e. Help individual faculty members understand that the quality of their performance in their teaching roles affects salary and promotion decisions.

3. Financial considerations

   In areas where federal funds are available, some of these funds may be used for development and support.

   Where budgets have been curtailed, what are other alternatives?

4. Human element is the key

   The staffs of teacher education institutions work with local teachers, attend local workshops and meetings, work with youth clubs, and involve undergraduate and graduate students in the process.

5. Involvement of business advisory committees, local agencies (such as the Urban League).

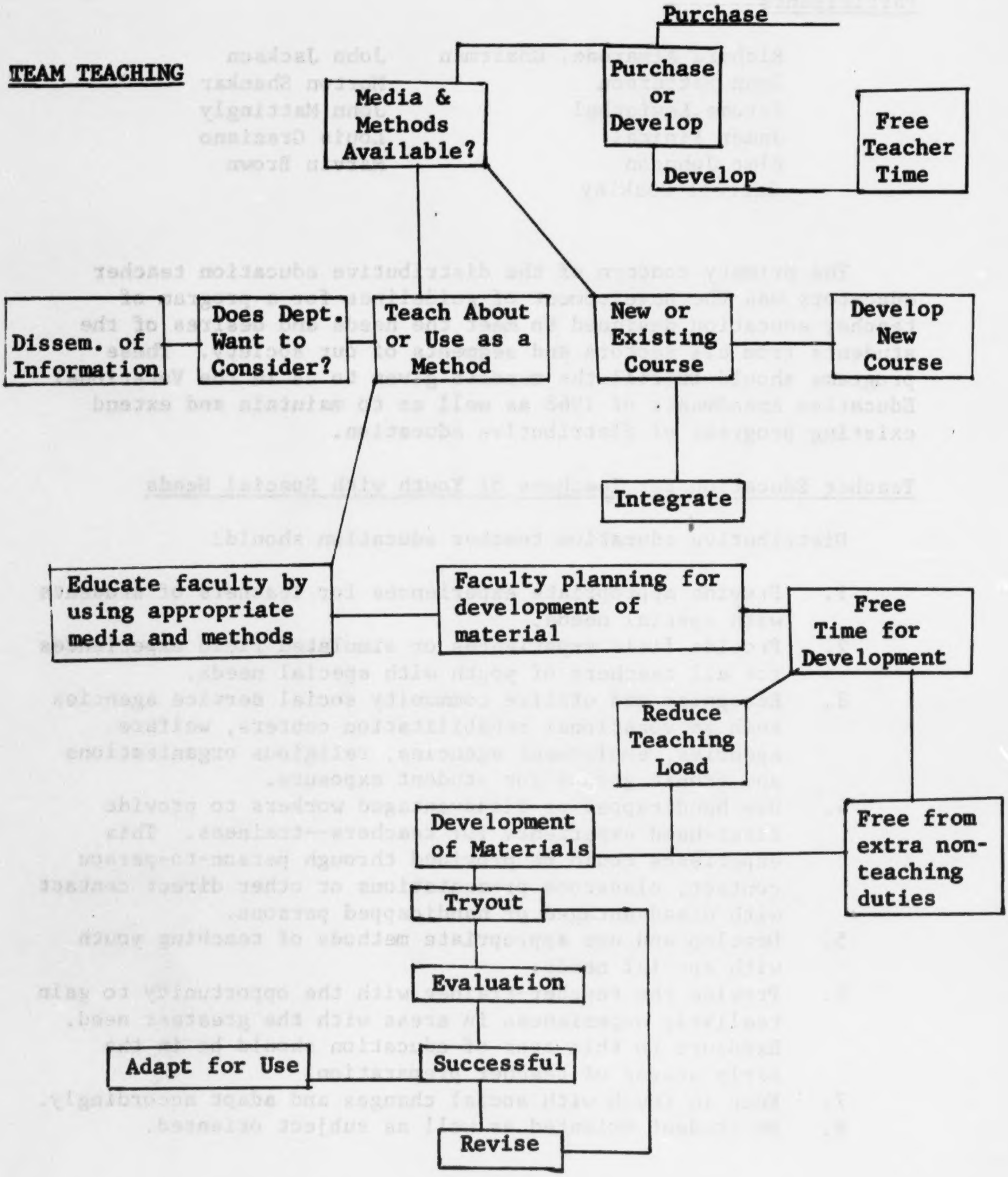
The tables which have been developed could be used as a type of survey instrument (without the blanks filled in) on which to get responses from the various classifications of educators for business to determine what they see as their functions in the preparation of the students about whom we are talking. The blank forms could also be used for self-evaluation by teacher education departments.

Table III is an example (but not a complete or all-inclusive example) of one way to present in flow-chart form the process involved in the implementation of one curricula component--team teaching; the chart shows decisions to be made, alternate possibilities, goals, etc. The flow chart might properly include many other decisions, goals, and operations. We are merely trying to show one approach which might be helpful in implementing a component.

Conclusion

In view of the extreme complexity of the teaching tasks in business education (as revealed in Tables I and II), it is not surprising that we are having difficulty in performing all educational functions for all people in preparing business educators. There are now so many agencies that can be responsible for components in the preparation of educators for business that perhaps none does adequately that function or functions for which it is best suited.

Table 3. AN EXAMPLE OF THE PROCESS INVOLVED IN THE IMPLEMENTATION OF A CURRICULA COMPONENT IN FLOW CHART FORM


TEAM TEACHING
Purchase
Purchase or Develop
Media & Methods Available?
Free Teacher Time
Develop
Dissem. of Information
Does Dept. Want to Consider?
Teach About or Use as a Method
New or Existing Course
Develop New Course
Integrate
Educate faculty by using appropriate media and methods
Faculty planning for development of material
Free Time for Development
Reduce Teaching Load
Development of Materials
Free from extra non-teaching duties
Tryout
Evaluation
Adapt for Use
Successful
Revise

DISTRIBUTIVE EDUCATION

Participants

Richard Almarode, Chairman	John Jackson
John Patterson	Morton Shankar
Jerome Levinthal	John Mattingly
James Finical	Louis Graziano
Elmo Johnson	Marvin Brown
Carroll Coakley	

The primary concern of the distributive education teacher educators was the development of guidelines for a program of teacher education designed to meet the needs and desires of the students from all sectors and segments of our society. These programs should fulfill the mandate given to us in the Vocational Education Amendments of 1968 as well as to maintain and extend existing programs of distributive education.

Teacher Education for Teachers of Youth with Special Needs

Distributive education teacher education should:

1. Provide appropriate experiences for teachers of students with special needs.
2. Provide field experiences or simulated field experiences for all teachers of youth with special needs.
3. Recognize and utilize community social service agencies such as vocational rehabilitation centers, welfare agencies, employment agencies, religious organizations and ethnic groups for student exposure.
4. Use handicapped or disadvantaged workers to provide first-hand experience for teachers--trainees. This experience could be provided through person-to-person contact, classroom presentations or other direct contact with disadvantaged or handicapped persons.
5. Develop and use appropriate methods of teaching youth with special needs.
6. Provide the teacher-trainee with the opportunity to gain realistic experiences in areas with the greatest need. Exposure to this area of education should be in the early stages of teacher preparation.
7. Keep in touch with social changes and adapt accordingly.
8. Be student oriented as well as subject oriented.

9. Give the teacher-trainee a sense of physical security to eliminate possible fears (training in judo or karate may be appropriate for the teacher who will be working in iner-city or urban schools*).

Revisions in the Philosophy of Distributive Education Teacher Education

A sound distributive education teacher education program must constantly focus on philosophy improvements and revisions to maintain a forward direction.

1. Teacher educators believe that courses and programs in distributive education should be included in residential vocational schools. This belief would be reflected in teacher education professional courses.
2. Leadership preparation in distributive education and vocational education should be strengthened through a closer cooperative effort between state departments of vocational education and teacher education programs, and local school districts, (workshops, seminars, extension courses, etc.)
3. Teacher education departments should continue their interest and effort in curriculum development in cooperation with the state departments of education.
4. Developments in post-secondary education in distributive education should be included in the teacher education programs.
5. Teacher education departments should recognize the importance of research and encourage the local distributive education teacher-coordinator to develop more research.
6. Exposure of the teacher-trainee to the distributive education program should be within the first year of the four year teacher education program. The student should have continuing contact with the DE teacher-educator during the entire four year program.
7. The state council and local advisory committees to the distributive education program should include the disadvantaged and handicapped.
8. The changing society should be recognized by distributive education teacher educators.
9. The teacher educator should keep current with all teaching situations through substitute teaching and other activities.

---

*National Seminar for Vocational Teacher Education, Chicago, October 1968, Dr. Edmond Gordon, ERIC Center for the Disadvantaged.

Cooperative and Work-study Education

A broader base of occupational experience is desirable for the teacher-trainee in the area of marketing and distribution. Occupational experience should be multi-level as well as various types.

The teacher education program should be willing to give assistance to other vocational services in developing the cooperative and work-study phase of our program.

Public Relations and Information

The distributive education teacher educators believe the public relations program for distributive education teacher education should be intensified.

1. **Distributive education teacher-trainees should be recruited from geographic areas where there is a shortage of teacher personnel.**
2. **A mobile distributive education classroom can be used as a public relations devise both for teacher education and for the local distributive education program.**
3. **Distributive education professional courses for all levels should be offered through extension to teachers in other disciplines as well as distributive education.**

Interdisciplinary Teaching

Teacher education in distributive education should utilize the behavioral sciences and all vocational areas through cases, studies, games and simulated experiences in reference to distribution and human relations.

A POSITION PAPER

Participants

Henry Brito
Herman Boroughs
Lucy Battle
William Lovelace
Arnold Freitag
Robert Russell
Dolph Camp
Randolph Nelson
Richard E. Green
Elaine W. House
L. M. DeRidder
Gerald K. LaBorde, Chairman

The committee on guidance at the National Seminar on Vocational Teacher Education conducted at the University of Tennessee, August 11-22, 1969, offers the following position paper on guidance and counselor education. The committee accepts and supports the view of the American Vocational Association on Guidance.

> Guidance is basically developmental in nature and holds potential for helping all students. These statements grow from this position:
>
> First. There is need to support the emphasis on the vocational aspects of guidance beginning in the elementary school and continuing through the secondary, post-secondary and adult levels of education.
>
> Second. There is need to support the position that all students need to acquire an awareness of and make personal decisions regarding the values of a work oriented society. Such values include the following beliefs:
>
> 1. All honest work has innate dignity;
> 2. Work holds potential for personal as well as financial rewards;
> 3. It is preferable to work for societal gains than just claim them;
> 4. Work is at least as much a way of making societal contributions as it is a way of gaining societal rewards; and
> 5. Work is more correctly viewed as a personal belief than as a necessary burden in our society.

The American Vocational Association feels that all students should have adequate opportunities to consider the desirability of such values. To achieve this end, it is important that vocational education in comprehensive schools be viewed as part of the total educational offerings of the school; and each student should be given an opportunity to consider vocational education at various times in his school life. Only one program of guidance should serve all students. The practice of establishing two separate guidance programs--one for vocational education students and one for other students--is not supported by the American Vocational Association. Guidance systems must systematically seek out guidance needs of students and provide services on the basis of needs of individual students wherever such students may be in school.[1]

The committee on guidance of the National Seminar on Vocational Teacher Education believes that counselors, teachers, and administrators should serve as agents of change to promote the idea that satisfactory careers can be attained through many educational approaches: adult education, evening and night school, correspondence and other extension study, propietory schools, area vocational schools, on-the-job training, and all types of individual study.

The committee on guidance was composed of counselor educators, directors of guidance, practicing and student counselors. The goal of the committee was to plan a program of counselor education to produce a product capable of performing the following:

1. Assisting students to:
    a. Develop an understanding of the world of work and to progress toward identifying and exploring possible careers.
    b. Understanding themselves, their interests, abilities and aptitudes.

---

[1] Vocational Aspects of Guidance, A statement of policy of the American Vocational Association, November 1968.

c. Understand others in order to function successfully not only in the world of work but also the world of living.

d. Become aware of the work and leisure opportunities available to the individual.

e. Encourage and develop the process of decision making.

f. Develop flexibility to facilitate the making of decisions in life and career.

g. Develop a positive self concept.

2. Assisting teachers to:

a. Develop a curricular framework sufficiently flexible to serve the individual.

b. Understand the individuals for whom they are responsible.

c. Participate in helping students attain their educational, vocational, and personal objectives.

d. Relate the course work to the educational and vocational needs of individuals.

e. Identify their course goals and appropriate approaches for their achievement and evaluation.

3. Assisting administrators to:

a. Understand the characteristics of the school's population and to provide appropriate learning opportunities.

b. Help individuals to attain their educational and vocational objectives.

c. Understand the need for success experiences for all youth in achieving optimal educational, vocational, and personal development.

d. Provide a flexible organization and administrative pattern and a broad range curriculum including a strong vocational program for assisting optimal learning.

4. Assisting parents to:

a. Understand their children's progress.
b. Understand and accept the strengths and limitations of their children.
c. Understand the physical and emotional needs of their children.
d. Understand the educational and vocational opportunities available to their children.
e. Participate in helping their children attain their individual objectives.
f. Understand and utilize the services of the guidance program.

OBJECTIVES

1. Provide the same services now available to college-bound individuals to all individuals.
2. Assist individuals to understand themselves and their world in order to achieve a realistic choice of educational and vocational goals.
3. Assist individuals in the implementation of their educational and occupational pursuits.
4. Assist in the placement of individuals.
5. Assist, develop, and participate in follow-up efforts for program improvement and individual self fulfillment.
6. Provide the initiative and climate for the promotion of change.

PRE-SERVICE

Input

1. Sources of Counselors
   a. Undergraduate programs, including undergraduate majors and minors.
   b. Graduates of colleges and universities; teachers, industry, etc.

2. Evaluation and Assessment

   a. Use of pre-program achievement (cognitive) battery to evaluate current knowledge and understandings necessary for the counselor role and function.

   b. Use of pre-program evaluation (affective) of those personal characteristics necessary for success as a counselor, such as: empathy, congruency, ability to communicate, positive self-concept, etc.

   c. The results of the evaluation (diagnosis) will be utilized to develop a program (process) for each individual. The program may range in length from six months to five years.

Process

1. Process involves the utilization of all the total resources available. This includes universities and college course offerings, and community resources.

2. The process will center on four basic areas.

   a. Planned experiences

      (1) T. V.
      (2) Interdisciplinary information
      (3) Visitation and observations of a variety of schools, industries, businesses and other community agencies.
      (4) Part-time and temporary job experiences

         (a) Employment security
         (b) Youth opportunity centers
         (c) Manpower Development Training programs
         (d) Vocational-technical schools
         (e) Community agencies

      (5) Assisting individuals to placement and adjustment in work and leisure time activities.

   b. Self-understanding

      (1) Use of group process as a continuing experience through the training period.

      (2) Continuing self-exploration and self evaluation based on the experiences of the program

c. Input and output gap

   (1) Completion of the theoretical base deficiencies identified through the initial assessment and on-going assessments.
   (2) Development of absent or limited counselor competencies needed to "help" another.
   (3) Planned course work and absent or limited other activities to assist in the development of the total individual.

d. Practicum

   (1) A continuous experience throughout the program.
   (2) Opportunities for early counseling experience.
   (3) Opportunities to work with the total population: disadvantaged, specialty oriented, college bound, all racial groups, early childhood, elementary, adolescent, young adult, mature adult, elderly adult, school administrators, teachers, parents, community agencies, and personnel offices.
   (4) Individual and group counseling experiences.

Output

1. A product that is equipped to function adequately in a broad range of counseling situations:

   a. Elementary
   b. Secondary (general and vocational)
   c. Post-secondary (college and vocational-technical)
   d. Industry, business, or any phase of the non-academic world.

2. A product that is aware of his individual unique traits and can function within his strengths and weaknesses.

Evaluation

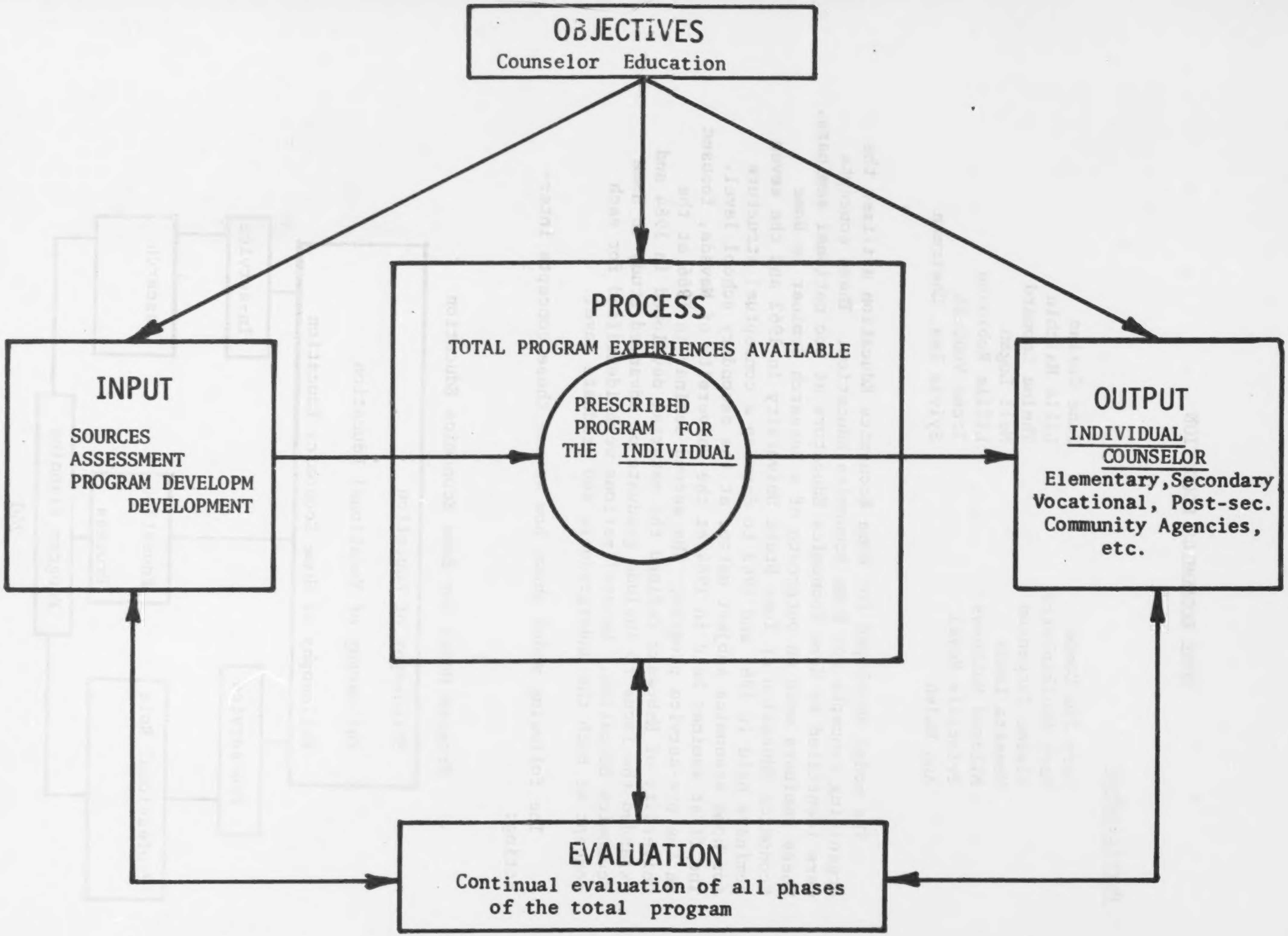
1. A continuing evaluation is a requisite to the successful and adequate functioning of the program.

2. The individual will be evaluated throughout the program (selective retention).

3. The program will be evaluated through the participant and the product.

4. The product will be evaluated at the completion of the program and during the professional experience of the individual.

5. A total on-going evaluation is planned for all areas of the system.


OBJECTIVES
Counselor Education
PROCESS
TOTAL PROGRAM EXPERIENCES AVAILABLE
PRESCRIBED PROGRAM FOR THE INDIVIDUAL
INPUT
SOURCES
ASSESSMENT
PROGRAM DEVELOPM
DEVELOPMENT
OUTPUT
INDIVIDUAL
COUNSELOR
Elementary, Secondary
Vocational, Post-sec.
Community Agencies,
etc.
EVALUATION
Continual evaluation of all phases of the total program

HOME ECONOMICS EDUCATION

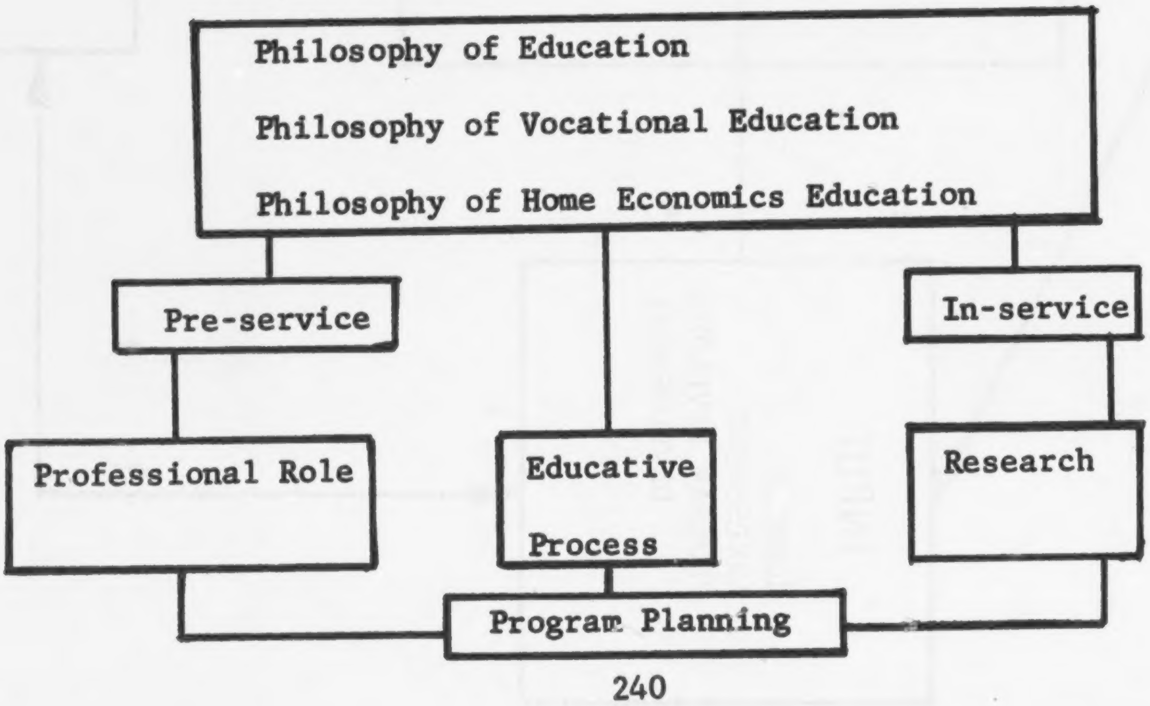
Participants

Mary Jim Combs
Mary Faulkinberry
Elaine Jorgenson
Venetta Lewis
Mildred Matthews
Priscilla Royal
Ann Walsh
June Cozine
Lilla Halchin
Thelma Leonard
Nell Logan
Lillie Robinson
Irene VonCesh
Sylvia Lee, Chairman

The model developed for Home Economics Education utilizes the organizing concepts for Home Economics Education. These concepts were identified by Home Economics Educators at two national seminars. These seminars were an outgrowth of a Research Seminar in Home Economics Education at Iowa State University in 1962 and the seven seminars held in 1961 and 1962 to develop a conceptual structure for home economics subject matter at the secondary school level. The first seminar held in 1964 at the University of Nevada, focused on the pre-service program. The second seminar in 1966 at the University of Nebraska refined the material developed in 1964 and expanded the focus to include graduate or advanced study in Home Economics Education. Generalizations were identified for each concept at both the undergraduate and graduate level.

The following model shows how we see these concepts interacting:

Program Model for Home Economics Education


Philosophy of Education
Philosophy of Vocational Education
Philosophy of Home Economics Education
Pre-service
In-service
Professional Role
Educative Process
Research
Program Planning

Taking one of the areas of particular concern -- "Working With Others" a Model or PERT system was developed as an example of how areas of concern could be approached. This Model could apply to the development of aspects of the teacher-education program for either pre-service or in-service. It could also apply to the development of local programs thus becoming an aspect of the teacher-education program. Similar models could be developed for preparing teachers for:

1. Occupational programs
2. Programs which serve different groups (i.e., physically handicapped, economically handicapped, mentally handicapped) and/or different levels (i.e., elementary, post secondary, adult).
3. Emerging trends in education such as: team teaching, individualized instruction, differentiated staffing, inter-disciplinary programs.

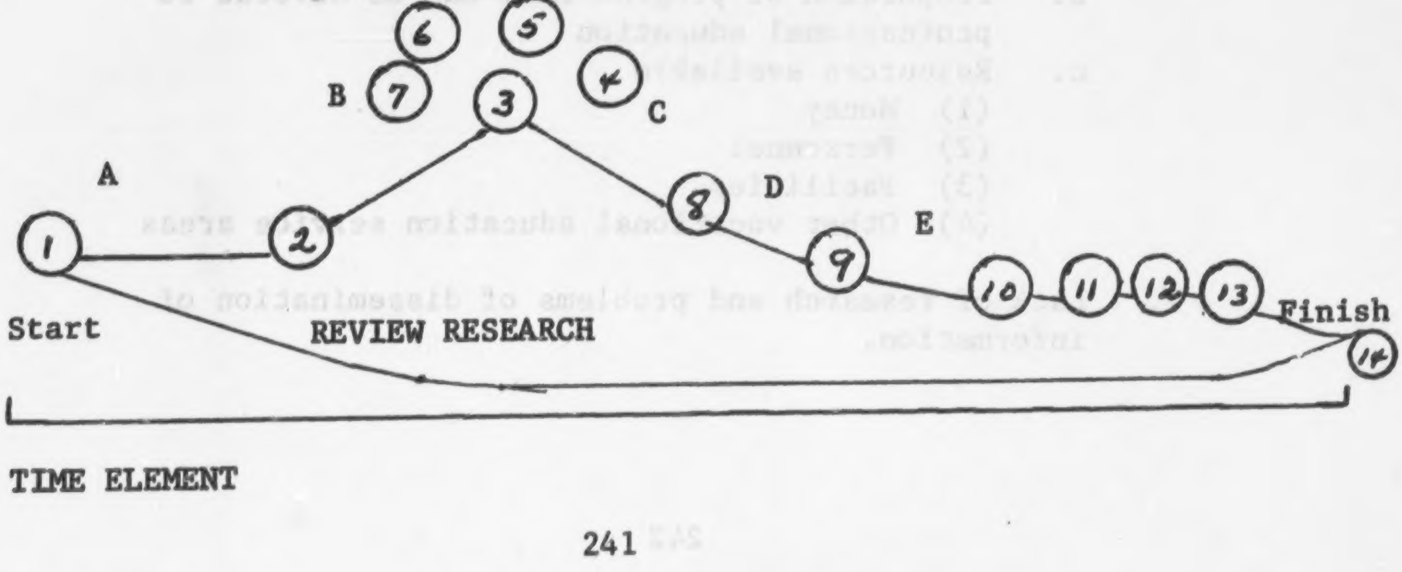
PERT System Diagram Model -- Working With Others

Event

1. Recognized need
2. Inter Dept./Inst. planning
3. Establish contact with
4. Business-industry
5. Chamber of Commerce
6. Welfare
7. Health Services
8. Planning meeting
9. Establish advisory council
10. Begin a program
11. Encounter group
12. Action research
13. In-service training workshop
14. Guidelines written for working with others

Activity

A. Planning
B. Direct contact
C. Follow-up of contacts
D. Identify and coordinate effort
E. Decision-making
F. Resource
G. Data collection
H. Periodic contact
I. Develop instructional materials



A number of impediments identified are impediments for some home economics teacher education programs but not others. Impediments to the development of home economic education were identified as:

1. Shortage of personnel for leadership positions.
2. Problems of communication
   a. State department and institution
   b. School administration and teachers
   c. Within home economics education due to differences in institutions and organizational structure
   d. Within vocational education due to differences among the service areas
   e. Terminology
3. Difficulties in keeping teachers up-to-date due to:
   a. Entry--re-entry of teachers
   b. Multiple roles of women
   c. Year round employment
   d. Lack of recognition on the part of teacher for need for continuing education
   e. Geography of state
4. Policies of various agencies or groups such as:
   a. Institutional policies
   b. Certification policies
   c. Policies concerning use of funds
   d. Conflicting policies
5. Status of Home Economics, Vocational Education and Education
6. Difficulty in providing all experiences desired due to:
   a. Location of institution
   b. Proportion of program that can be devoted to professional education
   c. Resources available
      (1) Money
      (2) Personnel
      (3) Facilities
      (4) Other vocational education service areas
7. Lack of research and problems of dissemination of information.

TRADE AND INDUSTRIAL EDUCATION PLANNING

Participants

James Eddy, Chairman
James Finical
Billy Jackson
Earl Knebel
Bill Lovelace
Dolph Camp
John W. Glenn
Elaine Jorgenson
Ivan Lee
Joe Reed

Introduction

The general objectives for the seminar were outlined and courses of action discussed.

It was pointed out that the group would maintain complete control of all action undertaken.

National Aspects presented to the group by Otto Legg, USOE.

1. Needs as seen by USOE
2. Modification of programs is the intent of the 1968 Amendments.
3. Approximately eight million projected enrollment.
4. According to state plan projections
   - a. Teachers needed for 1970
     - (1) 95,000 Secondary
     - (2) 65,000 Post Secondary
     - (3) 53,000 Adult extension
   - b. Training needs for 1970 were estimated as:
     - (1) 55,000 Pre-service
     - (2) 28,000 In-service
5. Long range estimates are
   - a. Teachers needed by State (5 years)
     - (1) 240,000 Projected by States
     - (2) 350,000 Projected by USOE

6. Congress is interested in
    a. What do you do for the people?
    b. What does it cost?
    c. Where would you like to go?
    d. What are your plans?
    e. What will it cost?

7. Base Teacher Education Projections on Existing
    a. Labor force
    b. Industrial development
    c. Number of persons served in State
    d. Present programs
    e. Where are we headed?
    f. Number of persons we have to serve.
    g. What output is expected?
8. Devise a system that will serve all areas of vocational education.

Plan of Action

The group developed the following list of problem areas:

1. Sources and methods of securing new teachers.
2. A review of certification requirements for a beginning teacher.
3. Review of teacher training courses of instruction (methods and content).
4. What are the areas of commonality to all vocational education?
5. What should pre-service preparation be?
6. What should in-service teacher training be?
7. Is special preparation needed for working with special groups such as handicapped, disadvantaged, etc.

Four sub-groups were established on an "ad hoc" basis to develop specific areas for immediate action. They reported back after lunch and recommended that these areas be considered:

Group 1

1. Develop model for mutual involvement between industry and teacher training institutions for soliciting qualified artisians for teachers and the training of these teachers.
2. Develop a model for national certification of all teachers--all teachers vocational, technical, and academic.
3. Develop a model for the disseminating occupational information and learning requirements for the purpose of uniting all education in a united effort.

Group 2

1. **What special preparations needed for working with special groups such as handicapped, disadvantaged, etc.**
2. **Review certifications requirements and course curriculum (teacher training) requirements for teaching vocation education.**
3. **What trade and industrial areas are common to all vocational services.**
4. **What should teacher requirements be for pre-vocational instructions.**

Problems for Discussion

Group 3

1. **State minimum for certification with regard for pre-service education.**
2. **Qualification for teachers of "pre-service" and course content classes.**
3. **Orientation to difference in ethic background of students.**
4. **Revision of course content for vocational instructor.**

Group 4

1. **Administration and coordination of T. & I. Teacher Education Programs.**
    a. **State Department to Teacher Education Programs**
    b. **College to college**
    c. **Within college**
2. **Revision and updating of curriculum**
    a. **Commonality**
    b. **Special offerings**
3. **Review of certification requirements Selection, pre-service and in-service experiences.**

The group decided to work in the following areas:

1. **Certification requirements as it relates to education**
    a. **Selection**
    b. **Pre-service**
2. **In-Service**
    a. **Professional improvement**
    b. **Occupational improvement**
    c. **Personal improvement**

3. Curriculum content

It is to be understood that the above word "certification" as used does not apply to the selection of teachers, but rather to the program of professional preparation necessary for certification. Emphasis was made to the fact that the 1968 Amendments deal to some extent with the cooperative programs--this must be taken into consideration.

It was recommended that the above problems be given to committees for analysis and development and then re-submitted to the entire group. In considering the problems, consideration should be given to the following groups:

1. Regular teachers
2. Cooperative teachers
3. Special teachers (for "ghetto," handicapped, etc. programs)
4. Adult teachers (extension)
5. Pre-occupational vocational teachers (career planning orientation).

The following committees were established on a voluntary basis:

1. Pre-Service Program
   - Ed Hill N. W. Gates
   - Walt Miner Bob Hilliard
   - Lester Harkleroad
2. In-Service Program
   - Wallace Sexton Bill Jackson
   - Earl Mills Jean Kelley
   - R. A. Phillips
3. Professional Course Content
   - Bill Douthat Art Berry
   - Robert Scott Jim Karnes
   - Ivan Lee Alvie Sarchett

The following "Outline" was proposed and accepted by the group to be used in studying each area:

1. Describe (so as to define) area to be studied
   a. Include present status and reasons for studying it.
2. Set-up objectives of study
3. Analyze and list major units or factors involved
4. Determine what is being done now and what should be done for future needs.
5. Examine forces that will help improve the situation and forces hindering improvement.
6. Propose alternatives for improving situation--listing pros and cons.
7. Develop strategy for implementation

   a. What to do
   b. Who should do it
   c. When and where
   d. What will be required financially

PRE-SERVICE EDUCATION FOR VOCATIONAL INDUSTRIAL TEACHERS

Pre-service vocational industrial instruction training is identified as those organized activities and experiences designed to familiarize and acclimate the new instructor to the classroom setting. Special emphasis is placed upon those activities having the purpose of organizing and presenting subject matter along with the development of those teaching skills that contribute to success in the classroom. Pre-service teaching training for many vocational industrial instructors is more than adequate but for some it is considerabley less than what is necessary for successful entry into the field of teaching. Many start their teaching careers with little or no formal teacher preparation experiences. Placing a tradesman in this position "on the job" would not be tolerated in industry. Fortunately these "instant teachers" are selected with care and the "mortality rate" is low. This is however not good enough in that students suffer while the instructor goes through a learning process.

Present practices of teacher selection

Training and certification of T. & I. instructors varies widely from state to state with the resultant effect being inconsistent and not always conducive to placing an instructor in the classroom who is familiar with the teaching-learning process. We therefore believe a standardized set of pre-service experiences should be identified and developed for new vocational industrial instructors.

Broad Objectives

1. Provide a basic introduction to the broad field of vocational education with special emphasis on trade and industrial education.
2. Develop an understanding of the value of a sound general education to vocational industrial teacher success.
3. Develop the idea of maintaining technical and teaching competency and promotion of professional growth.
4. To not only maintain but up-grade the quality of the entry level vocational industrial instructor.
5. Develop an understanding of and impart some of the basic skills of teaching to the prospective vocational industrial instructor.
6. To develop human relations skills and an understanding of their importance in teacher/learner relationships.

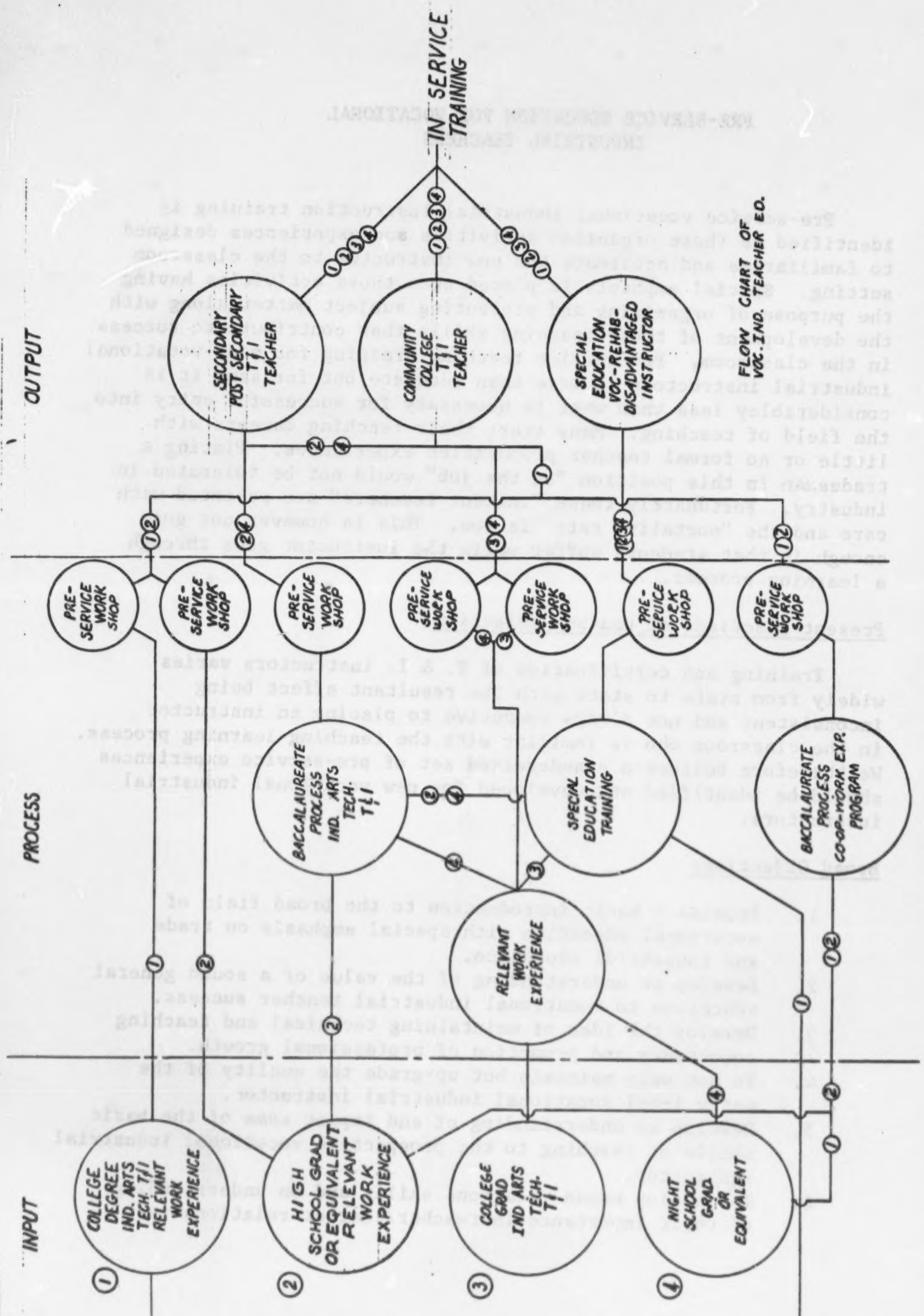

INPUT
PROCESS
OUTPUT
① COLLEGE DEGREE IND. ARTS TECH. T/I RELEVANT WORK EXPERIENCE
② HIGH SCHOOL GRAD OR EQUIVALENT RELEVANT WORK EXPERIENCE
③ COLLEGE GRAD IND ARTS TECH. T/I
④ NIGHT SCHOOL GRAD OR EQUIVALENT
RELEVANT WORK EXPERIENCE
BACCALAUREATE PROCESS IND. ARTS TECH. T/I
SPECIAL EDUCATION TRAINING
BACCALAUREATE PROCESS CO-OP WORK EXP. PROGRAM
PRE-SERVICE WORK SHOP
SECONDARY POST SECONDARY T/I TEACHER
COMMUNITY COLLEGE T/I TEACHER
SPECIAL EDUCATION VOC-REHAB DISADVANTAGED INSTRUCTOR
IN SERVICE TRAINING
FLOW CHART OF VOC. IND. TEACHER ED.

Figure I Flow Chart of Vocational Industrial Teacher Education

While the teacher trainer or teacher training institution does not set up nor pass on certification requirements it is recognized that the success or failure of the pre-service vocational industrial instructor workshops is directly dependent upon the instructor selection process. Obviously it is wise to insist upon and select those tradesmen who will meet certification requirements of the many states. As such, in identifying pre-service training for vocational industrial instructors we have listed some pre-requisites for certification. It is our sincere belief that these should be noted as minimal.

Desirable Day Trade Experiences

Be considered a master workman in his trade and have at least two years of journeyman experience as a wage earner in the trade he will teach. His technical training and experience should be sufficient that he can teach all the necessary phases of this instruction to the learners. Experience will be ascertained by work verification, written and/or oral tests and performance tests.

He should be of high moral character and dedicated to a career in teaching.

Pre-service training will consist of compulsory attendance at a two-week teacher orientation workshop sponsored by the state teacher training institution. The workshop should present the opportunity for the new vocational instructor to familiarize himself with classroom management, teaching methods, Psychology of Learning, trade analysis and course organization, philosophy and practices in vocational education, use and development of instructional aids, human relations, professional development, safety and liability responsibilities, guidance and counseling procedures and evaluation of learning. In addition the instructor will observe a master teacher in the classroom setting so that he might become familiar with classroom procedures.

The new instructor shall sit with fellow instructors, state supervisors, the local director or a teacher trainer and study curriculum materials so as to be familiar with the organization of subject matter for his field.

Additional desirable experiences should include student teaching, internship (with pay) and/or a college degree.

Desirable Cooperative Vocational Program Teacher Experiences

Must have a bachelors degree from an approved university or college with a minimum of 500 hours (clock) in technical or shop courses in the special field to which the coordinator is assigned. He must have had at least 450 clock hours of approved professional

courses in Industrial Education or an equal amount to which coordinator is assigned. A minimum of twelve quarter credits of course work in the operation of a cooperative program and other vocational courses.

Shall have a minimum of three years teaching experience in an approved T. & I. program, practical arts or in special field of coordination.

Shall have a minimum of three years as a wage earner in an approved industrial occupation (Journeyman level).

Shall attend a one week workshop for coordinators with experiences provided in the following areas: Coordination Techniques, Vocational Administration, Human Relations, Program Development, Public Relations, Supervision, Related Training, Vocational Guidance and Counseling.

Desirable Pre-Vocational or Orientation to the World of Work Experiences

Shall hold a Baccalaureate Degree in Industrial Education from an approved teacher training department in a college or university.

Shall have a minimum of 3000 hours of adult wage earning experience, such experience to be in the family of occupations in which instruction is provided.

Shall be thoroughly familiar with training opportunities on all levels of education both private and public and in addition should have a thorough understanding of U.S.E.S. operations.

Shall have taken such course work in his undergraduate preparation as Vocational Guidance, Sociology of work, Occupational Information, Industrial Practices and Processes, etc.

Special Education

Current legislation places increased emphasis on occupational education programs for the handicapped and disadvantaged youth. Pre-service trade and industrial teacher education has done little or nothing in the way of preparation of this teacher of special education programs. This indeed is incongruous in light of the fact that many trade and industrial instructors have in recent years been called upon to develop course materials and otherwise work with this type of student. It is our recommendation that teacher training institutions give their immediate and urgent consideration to the development of a curriculum with objectives of preparation of this kind of vocational industrial instructor.

Desirable

Shall hold a Baccalaureate Degree from a college or university which has an approved teacher training department, with major course work in industrial education and minor course work in special education.

Shall have a minimum of two years of adult wage earning experience with such experience being in the family of occupations in which special education is provided.

Shall have taken an internship or student teaching in an occupational skill center, vocational rehab program, occupational training center, basic education center, state hospital or other similar situation.

Shall have had such special course work, workshops or experiences as to help him to communicate or relate to those students typically identified as hard core, disadvantaged or deprived both educationally or culturally.

Adult Evening Instructor

Desirable requirements are similar to requirements for the day trade instructor. Should also have a committment to partake of in-service training when available and opportune.

Implementation

1. **Conferences involving the vocational division of the State Department of Education, the local vocational director and the teacher training institution should be called for the purpose of identifying location of and number of pre-service vocational industrial instructor workshops.**
2. **Workshops should be scheduled at times and in locations convenient to new instructors throughout the state.**
3. **Certification of new instructors will be contingent upon the successful participation and completion of a pre-service workshop.**
4. **The teacher training institution will develop and organize the workshops in cooperation with the vocational division of the state department of education and local vocational director, workshop content shall be consistent with pre-service teacher training objectives and determined by mutual consideration of aforementioned parties.**
5. **Because of the necessity of financing the pre-service workshops and in keeping with the current request for less clock hour type instruction, it is suggested that these workshops be conducted on a tuition/fee--college credit basis.**

Forces Hindering Development of Extensive Pre-Service Training

Recognizing that many varied forces are present that seriously hinder the development of an adequate pre-service teacher education program, it is suggested that means be devised to counteract these forces. Some of the forces that have been identified are the schools academic traditions, the ever present classroom teacher shortage, lack of awareness on the part of public school administrators, state department of education, teacher training institutions, general lack of knowledge as to what constitutes a quality program on the part of the general lay public, insufficient enabling regulations, and lastly the most serious limiting factor is the lack of sufficient finances in order to conduct a pre-service program.

Curriculum and Professional Course Content for Vocational Industrial Teaching

Introduction

It is assumed that the prospective vocational industrial teacher has met the necessary requirements for initial employment as prescribed by the State Department of Education or Certification Agency and possesses those occupational or trade competencies necessary for the trade or program to be offered. There is also general agreement among educators, lay personnel, and Certification Agencies that in order to be a competent teacher, an individual needs to be knowledgeable in the techniques of teaching, aware of his responsibilities as a teacher, and cognizant of the teaching-learning process.

These areas of need are usually referred to as the professional courses, or needs, and should provide the basis for development of pre-service and in-service teacher preparation as well as the curriculum for prospective Baccalaureate degrees. It should be recognized, however, that although these needs should, and can be identified, the depth of attainment will vary for each trade or industrial teacher position--regular day trade, part-time cooperative coordinator, adult instructor, pre-vocational instructor, and those teaching special courses.

Objectives of Professional Vocational Industrial Education

The Vocational Industrial Teacher should:

1. Understand and be able to use educational and vocational industrial terminology concepts and philosophy.
2. Develop initial appreciations and utilizations of the power and efficiency of sound educational practices and principles with regard to vocational industrial teaching.

3. Understand the place and nature of vocational industrial offerings in the total educational program.
4. Know the basic elements of an instructional analysis as applied to the principles of organization of content for teaching.
5. Select and properly use educational media.
6. Understand and be able to construct evaluative instruments suitable for measuring skill proficiency as well as related information.
7. Be able to plan for and initiate procedures for self-evaluation and self-improvement.
8. Organize and administer the instructional facility.
9. Understand the individual learner and the learning process.

The objectives or professional needs can be identified as understandings, skills and attitudes as they relate to the teaching of an area of vocational industrial education and are most efficiently stated in terms of behavior. Common behaviors desirable of the competent teacher are:

1. To develop an understanding of Vocational Industrial Education with respect to its role in society. A competent teacher will be able to:
    - a. Use acceptable educational and Vocational Industrial terminology to communicate effectively.
    - b. Recognize the place and nature of Vocational Industrial programs and offerings within the total educational program.
    - c. Identify the basic elements of an occupational analysis.
2. To develop skill in the techniques of teaching Vocational Industrial subjects or areas. A competent teacher will be able to:
    - a. Organize content for instruction and develop appropriate instructional devices for teaching industrial subjects.
    - b. Select and properly use educational media.
    - c. Prepare and effectively utilize evaluation instruments.
    - d. Organize and administer the instructional facility.
3. To develop desirable attitudes towards education, teaching, work and worker, and the teaching learning process. A competent teacher will be able to:
    - a. Recognize and utilize self-improvement procedures.
    - b. Recognize the uniqueness of the learner and how individuals learn.
    - c. Recognize those factors of human behavior which affect achievement and success.

REGULAR DAY TRADE TEACHERS

It is recommended that beginning vocational industrial teachers attend a pre-service workshop or seminar of two weeks duration followed by one of the following courses each year until all five courses are completed (5 hours each, total 15 semester hours as minimum).

***1. Fundamental concepts of foundations of vocational education (orientation)**

- **a. Basic philosophy, orientation, and professionalization**
- **b. Terminology, local, state, and federal relation**
- **c. Basic interpretation of legislation**
- **d. Basic organization and administration**
- **e. Professional organizations and youth clubs.**

2. Methods and techniques of teaching Vocational-Industrial subjects

- **a. Job of instruction, lesson planning, and presentation, (4-step or similar)**
- **b. Aids and devices, (demonstration and related content)**
- **c. Evaluation devices and techniques**
- **d. Learning theory and application**

***3. Occupational Analysis**

- **a. Analysis technique, identification of content**
- **b. Sequential order, instructional analysis as related to course construction**

4. Course construction for Vocational Industrial Education

- **a. Philosophical concepts, objectives, selection and arranging of content, (manipulative and related content), test construction--information and performance--teaching plan of procedure**

5. Evaluation in Vocational Technical Education

- **a. Objectives, types of tests, and measuring devices**
- **b. Test construction**
- **c. Evaluation of instructional media and course materials. Facility evaluation, course and program evaluation.**

***Core courses for all service areas.**

6. Electives and supplemental courses
    a. Subject to the approval of the state supervisor of Trade and Industrial Education
    b. A minimum of six semester hours within a five year period which will make a direct contribution to the individual teaching competency. They may be selected from the following courses or industrial sponsored workshops.

7. Conference leading techniques
    a. Application to classroom, advisory committees participation as conference leader, leadership development problem solving technique (approaches to conference leading)

8. Problems in Vocational Industrial Education
    a. Public relations for Industrial Vocational Education
    b. Shop organization and management
    c. Administration and Supervision
    d. Occupational Surveys
    e. Principles and practice of vocational guidance

Cooperative Education Coordination

Assuming appropriate occupational experience, the required minimum formal education should be a B.S. degree and include the following courses:

1. Coordination of cooperative education (certificated temporarily on this course). Full certification requires following courses. Any of the following courses not completed prior to temporary certification to be taken at the rate of one course per year.
2. Conference Leading Techniques
3. Principles and Practice of Vocational Guidance
4. Occupational Analysis
5. Curriculum Construction
6. Organization Administration Vocational Industrial Education
7. Principles and Practices of Vocational Guidance

Adult Education Teachers

Assuming appropriate occupational competency and selective factors for personal and leadership characteristics desirable for adult evening teachers.

1. For initial employment

    a. 6-10 hours (clock) pre-service
    b. Orientation to instructional program
    c. Organization of instructional material
    d. Basic methods of instruction
    e. Orientation to the adult student characteristics and learning principles

2. In-Service -- Not less than 30 hours of in-service preparation appropriately distributed, of the following content:

    a. Utilization of analysis of trade
    b. Organization of instructional material
    c. Preparation of instructional unit
    d. Four-step method of presentation
    e. Principles and practices in vocational-industrial education
    f. Classroom management
    g. Characteristics of adult learning, interests and motivation

3. Special needs of instructors may be certified for:

    a. Vocational-industrial
    b. Psychology of the exceptional child
    c. Urban sociology and ethnic groups
    d. Vocational guidance
    e. Vocational rehabilitation

Teachers of Pre-Vocational Subjects (Occupational and Career Orientation)

Programs organized for career orientation should be interdisciplinary and encompass the total occupational spectrum--involving all service areas. They should be organized to begin as low as the sixth grade and developed for a continuum. The instructional program should include a team of occupationally oriented instructors and such programs shall consist of organized study of occupations including explanation and visits to industries, business and vocational schools and programs. In areas where limited industry and business exists a mobile unit may be developed with media and resource material to implement the development of such a program among several schools in a given region.

In the professional preparation of pre-vocational teachers, the following special courses are prescribed:

1. Occupational and educational information
2. Vocational guidance
3. Occupational structure and manpower information

Factors hindering full development of professional programs:

1. Finances
2. State Department and/or University organization
3. Lack of numbers of qualified personnel
4. Certification requirements; their lack of uniformity
5. Lack of adequate research

    a. Development of instructional materials
    b. Dissemination of materials
    c. Lack of trained personnel

6. Resistance to change

Forces for improvement of professional programs:

1. Desire of Vocational Industrial Educators for continual professional development.
2. Projected increase of pupil enrollments necessitating many new instructors and their need for professional growth and development.
3. Development of newer educational media-program learning, etc.
4. Emphasis of U. S. Office on need for and allocation of funds for this purpose.

IN-SERVICE TRAINING FOR VOCATIONAL INDUSTRIAL EDUCATORS

It is well documented that there is a shortage of qualified vocational industrial teachers and this shortage will continue to be a critical problem in the seventies. Many of the future teachers that will fill these positions are currently working in industry, where they are developing occupational competencies in a vocational area. The artism with vocational competencies, however, lacks the professional teaching knowledge and understanding to effectively teach his vocation. The professional courses needed for teaching methods and technique require several months and even years to complete by the traditional teacher training curriculum. It is, therefore, necessary that appropriate programs be initiated that will provide industrial personnel, who are going to teach, with the type of in-service training which will enable skilled artisans to become competent teachers in their vocational areas, and to keep abreast of technological changes in his field.

A review of existing in-service programs indicate that there is a need for developing a system which will provide professional competencies and up-dating vocational skills. The system recommended, in this report, is a cooperative effort of national, state and local agencies to coordinate existing programs and supplement these programs with a network of regional seminars.

Definition

The in-service training for vocational industrial teachers is defined as those activities that will up-grade occupational skills, instructional competencies and personal improvement concurrent with the teaching assignments.

Objectives of Study

It is the objective of this study to develop a model for a systematic and comprehensive in-service training program that will provide skilled artisans with the information necessary to become competent teachers in their vocational area, to keep up-to-date in the latest technical changes in their field and to develop personal qualities desired in a teacher.

Major Unit of Study

This study is focused on three major areas for development of in-service training programs.

1. Occupational competencies
2. Teaching abilities
3. Personal qualities

Consideration was given for in-service training of vocational personnel in:

1. Day trade
2. Coordinator
3. Special
4. Adult
5. Pre-vocational programs.

Existing Programs

A review of existing programs in several of the states indicate that the in-service training program is conducted as part of the regular teacher training program, and very few programs were designed for a systematic approach to keeping teachers up to date in the latest developments in a particular area.

It was the committee's opinion that existing programs offered by Teacher Training Institutes do provide adequate opportunity for an artisan to obtain the professional courses necessary for acquiring the skills needed in teaching. However, many of the individuals entering the vocational industrial teaching profession need short term programs that will provide a comprehensive understanding and abilities for managing classroom activities in a shorter period of time.

Proposed System

A look at the overall program of preparing individuals from industry to managing a classroom activity and preparing the course materials, requires a system for coordinating a program that will provide the training necessary for technical competence, teaching abilities, and personal qualities.

The following chart illustrates a model to provide a system of coordinating the activities that will provide a balanced in-service training program.

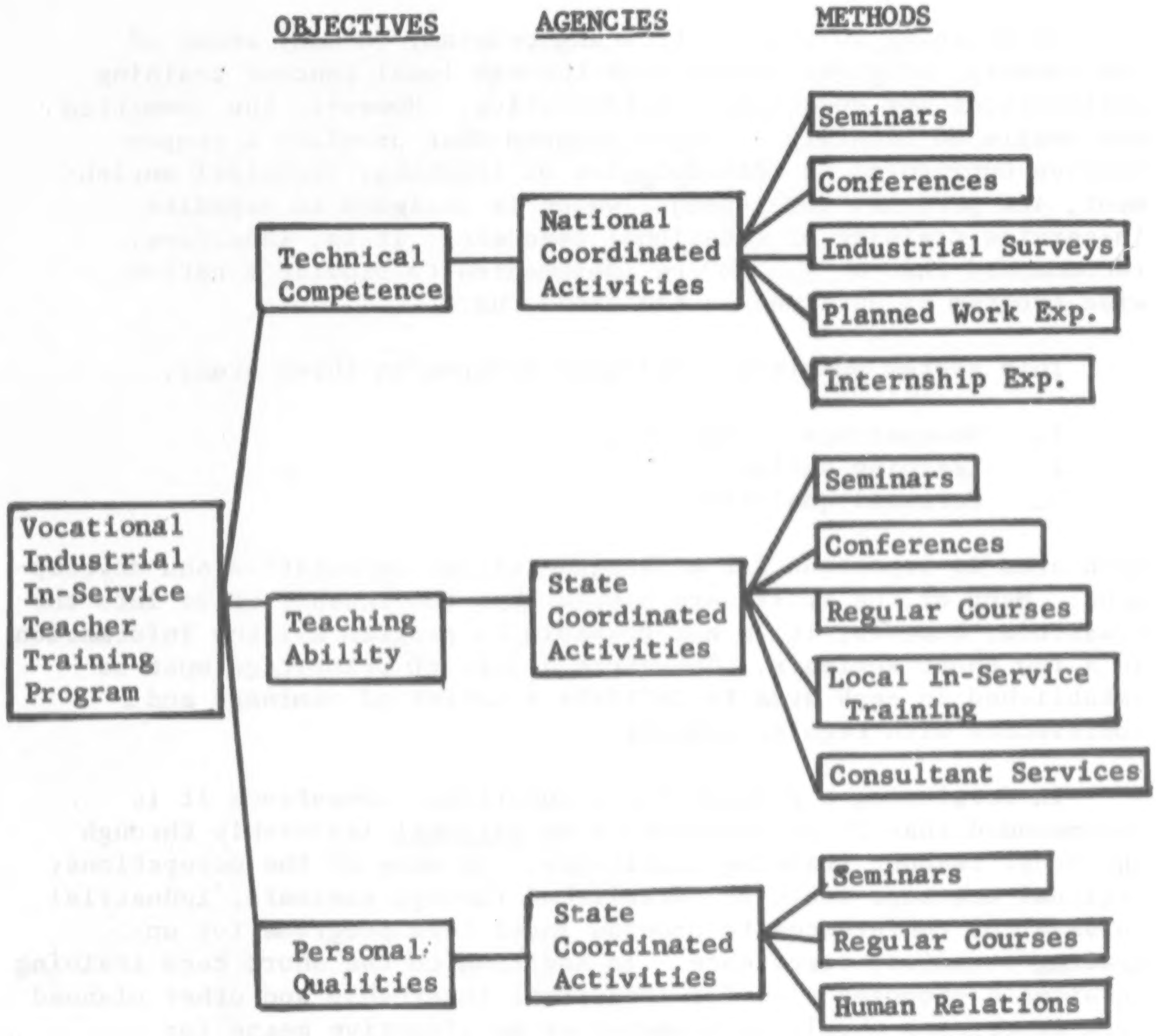

OBJECTIVES
AGENCIES
METHODS
Vocational Industrial In-Service Teacher Training Program
Technical Competence
National Coordinated Activities
Seminars
Conferences
Industrial Surveys
Planned Work Exp.
Internship Exp.
Teaching Ability
State Coordinated Activities
Seminars
Conferences
Regular Courses
Local In-Service Training
Consultant Services
Personal Qualities
State Coordinated Activities
Seminars
Regular Courses
Human Relations

Figure II In-Service Training System
For Coordinating Activities

An in-service training program, that contains the type of instruction and guidance necessary for teacher preparation, is vital to the success of those individuals entering the teaching profession from industry. It is equally vital for the training of our youth to obtain instruction from qualified vocational teachers with industrial experience and who have the ability to teach his occupational area.

In most states, several years of occupational experience is necessary for initial certification. It is recognized that it takes several years of work experience to become competent in most occupations. It must be recognized that the teaching profession also requires training and experience for competent instruction of a given occupation.

An existing in-service training program, in many areas of the country, provides course work through local teacher training institutions for vocational certification. However, the committee was unable to identify a single program that provides a comprehensive curriculum in methodologies of teaching, technical enrichment, and personal development, which is designed to expedite in-service training of vocational teachers. It is, therefore, recommended that a "system" be implemented to provide a nation wide program as outlined in the above chart.

This system provides a balanced program in three areas.

1. Occupational competence
2. Teaching ability
3. Personal qualities.

Each area is important for effective teacher orientation and development. Many of the skills are needed when the teacher walks into the classroom, however, it is not possible to program all the information in a few short seminars. Therefore a list of priorities must be established in each area to initiate a series of seminars and conferences with regular courses.

In developing a program for occupational competence it is recommended that it be coordinated by national leadership through the local teacher training institutes. In many of the occupations, regional meetings could be established through seminars, industrial surveys, or conferences to provide short term programs for upgrading technical competence. In addition to the short term training sessions a proposed plan for industrial internship and other planned work experience should be promoted as an effective means for teachers to return to industry for summer sessions or at other pre-arranged times.

To implement this program it may be necessary to extend the contract time to cover in-service training for occupational upgrading of staff.

As has already been stated previously in the report there is already an effective program in most states in training teachers how to teach. However, the common complaint is that it takes too long to obtain the necessary information that a teacher needs particularly at the beginning of his professional career or that there are too many pre-requisites required prior to being able to obtain the courses needed. To eliminate these common difficulties it is recommended that each state promote through local teacher training institutions, a series of short seminars and conferences that would expedite needed information for beginning teachers. It is also necessary that each agency, employing these teachers, be encouraged to promote these activities by providing funds and time for the teachers to attend these meetings.

In addition to the regular courses offered at the local teacher training institutions, it is recommended that consideration be given to provide the new teachers with special services during training programs within the frame work of his environment. These services may include guidance programs or special consultants, that will provide a means of obtaining solutions to specific problems encountered in the classrooms.

Personal qualities is a broad area and is often over looked as important for beginning teachers. Although, this area includes general educations it must be intergrated into the system for personal growth. Each of the areas covered under general education are necessary for better understanding of some of the social issues that face the classroom teacher of today.

One of the common complaints of industrial personnel entering the teaching profession is their ability to speak and write effectively. It is in this area that local teacher training institutions could initiate short seminars for up-grading teacher competencies in these areas.

Any program will be only as effective as participation will allow. It is, therefore, vital to the entire vocational program that we cooperate in providing the types of programs that will be meaningful and relevant for teacher preparation, and that the local school administration support these programs by encouraging their teachers to participate and providing the necessary release time.

TECHNICAL EDUCATION

Participants

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Ray Doane	Ronald Frye
Walt LaBaron	Ralph Matthews
Art Morgan	Barney Myers
R. Redditt	David Sherren
Robert Logue	

Framework for the Program Model

1. The programs should incorporate the best elements from those presently in existence.
2. Technical education is post secondary education.
3. Relevancy is of prime importance in any program of technical teacher education.
4. A core of knowledges rather than a core of courses is needed.
5. "Societal" conditions effect preparation of teachers in a variety of ways.
6. Any plan for technical teacher education programs should have built-in flexibility.
7. Competency is of primary consideration.
8. Certification is dependent upon competence.
9. Long range programs should aim toward a first degree and continuing study.
10. In-service education will provide for up-dating.
11. Technical teacher education is a joint effort between education and industry.
12. Teacher preparation programs must be individualized allowing for strengths and weaknesses.
13. The teacher education program should provide for advancement.
14. Evaluation must be continuous at all levels of the educational process.
15. Funding of technical teacher education will be provided by combinations of federal, state and local sources. Funds from other sources will be available for special projects.
16. Technical expertise is obtained from a wide variety of experiences and should be accepted and credited as part of the educational process.

5

Vital Technical Teacher Competencies

1. Competency is a prime consideration. It consists of three parts:

    a. Technical
    b. Teaching
    c. Personal-social

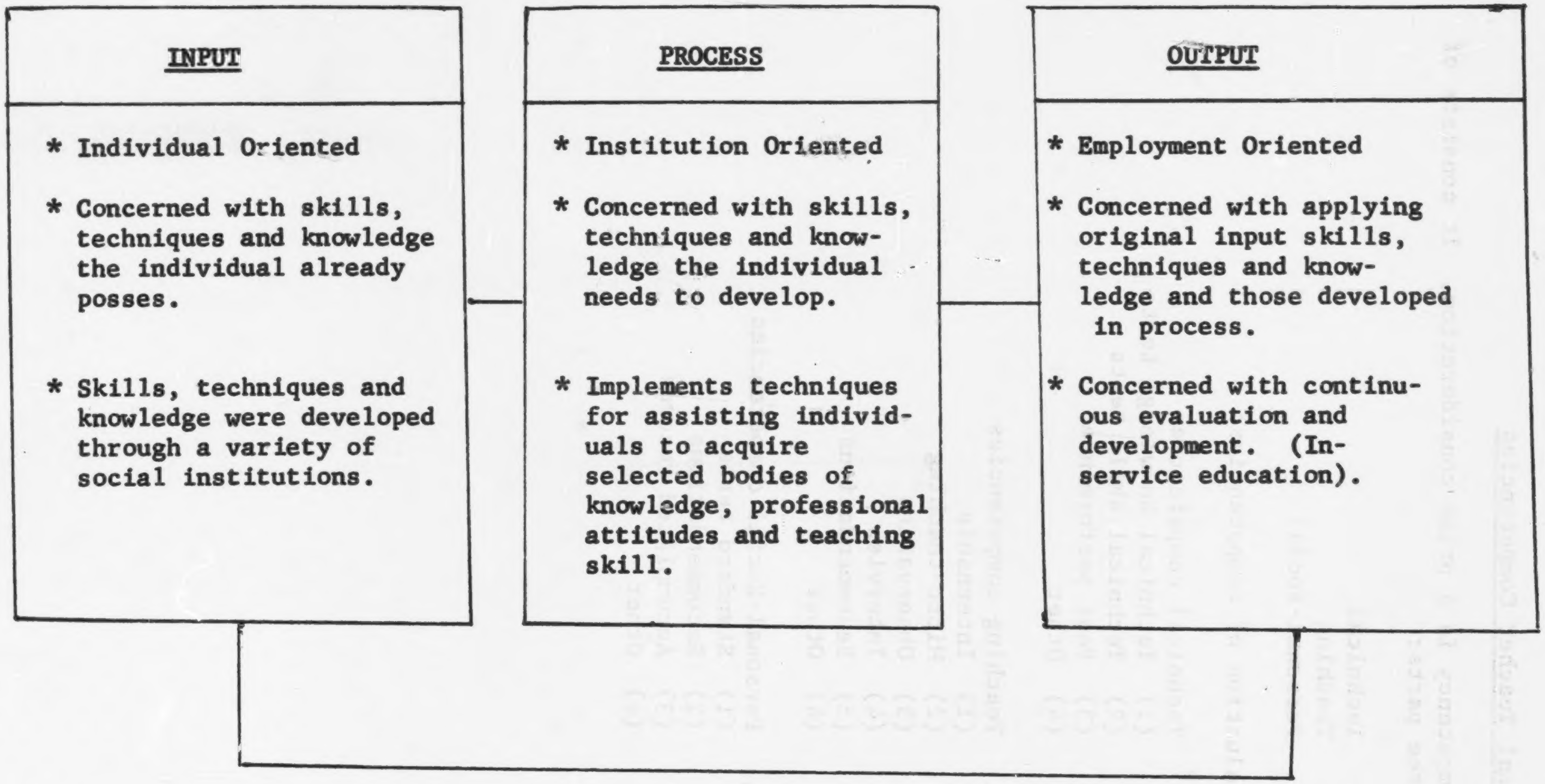
2. Evaluation of competencies:

    a. Technical competencies
        (1) Technical knowledge tests
        (2) Technical skill tests
        (3) Past performance
        (4) Other

    b. Teaching competencies
        (1) Internship
        (2) Micro-teaching
        (3) Observation
        (4) Interview
        (5) Recommendations
        (6) Other

    c. Personal-Social competencies
        (1) Standard tests
        (2) Recommendations
        (3) Accumulated records
        (4) Other

THE PROGRAM MODEL



INPUT

- * Individual Oriented
- * Concerned with skills, techniques and knowledge the individual already posses.
- * Skills, techniques and knowledge were developed through a variety of social institutions.

PROCESS

- * Institution Oriented
- * Concerned with skills, techniques and knowledge the individual needs to develop.
- * Implements techniques for assisting individuals to acquire selected bodies of knowledge, professional attitudes and teaching skill.

OUTPUT

- * Employment Oriented
- * Concerned with applying original input skills, techniques and knowledge and those developed in process.
- * Concerned with continuous evaluation and development. (In-service education).

INPUT - INDIVIDUAL ORIENTED

SOURCES

* High School Programs
* Military Programs
* Community College Programs
* Four-Year College and University Programs
* Adult Education Programs
* In-Plant Training Programs
* Governmental Agencies
* Business-Industrial Agencies
* Retirees - Professional and Military
* Hobbyists
* Dropouts
* Teachers

PERSONAL ATTRIBUTES

SKILLS AND KNOWLEDGES

* Personal
* Human Relations
* Social
* Technical
* Teaching

SOURCES

* Home and Family
* Schools, Churches and other Community Agencies
* Military
* Work Experience

CONSTRAINTS

* Personal Bias
* Health, Age, Sex, Race, and Physical Handicaps
* Nationality, Religion
* Family Influence
* Finances
* Learning Capacity
* Geographic Location
* Socio-Economic Status
* Ignorance of Opportunities
* Counseling
* Societal Influence
* Work Experiences
* Military Influences

PROCESS - INSTITUTION ORIENTED

VEHICLES

* Formal Courses
* Programed Learning
* Seminars and Institutes
* Internships
* Industrial Experiences
* Community Service

ACTION

* Assesment of Original Individual Skills and Knowledge
* Advising and Counseling

Competencies Required	_	Competencies Possessed	=	Program Prescription

* Admittance to and participation in program for acquiring selected bodies of new knowledge, techniques and skills.

CONSTRAINTS

* Financial Resources
* Physical, Educational and Technical Facilities
* Geographic Location
* Program Recognition and Leadership
* Faculty attitudes and Biases and Interdisciplinary Communication

TECHNICAL

* Natural, Physical, and Social Sciences
* Mathematics
* Technical Theory Techniques and Skills

TEACHING

* Classroom and Lab Management
* Methods of Instruction Learning Theory
* Teaching Observation
* Internship
* Curriculum and Course Planning
* Research
* Resources and Instructional Media

PERSONAL-SOCIAL

* Communications
* Social Sciences
* Humanities
* Human Behavior Sciences

OUTPUT - EMPLOYMENT ORIENTED

TYPE OF INSTITUTION

* Community College
* Technical Institute
* Area School
* Technical College
* Senior College
* Industrial Training School
* Governmental Training
* Military Training
* Secondary School
* Special Programs
* Special Groups

EMPLOYMENT ROLE

FUNCTION

* Instruction
* Coordination
* Supervision
* Administration
* Research

ACTION

* Subject Specialist
* Teacher - Student Interactor
* Special Student Instructor
* Institutional Contributor
* Community Contributor
* Professional Contributor

INITIATION OF ROLE IMPROVEMENT

* Student Reaction
* Teacher Reaction
* Supervision
* Leadership Assignment
* Advisory Committee
* Renewal and Up-dating
* Research-Educational and Technical

ADMINISTRATION OF VOCATIONAL TEACHER EDUCATION

Participants

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Robert Werner	Robert McCardle
Alfred Patrick	

The Administration of Vocational Teacher Education in small group action planning, investigated the following goals. A plan of action has been proposed for each goal except for number two which is a combination of a goal and action.

These long-range goals would appear pertinent to vocational education but are not listed in order of priority.

1. To obtain inter-service cooperation among various disciplines in the vocational teacher education process. Potential ways of accomplishment:

   a. A joint committee of representatives of all services at the state vocational association level to provide a program of action to implement the goal.
   b. To initiate a position within the teacher training institutions with the functions to coordinate all vocational teacher education programs.

2. To identify and develop administrators with effective skills in management and vocational education on a state and local level.
3. To provide an organized program to up-grade State Administrators. Potential ways of accomplishment:

   a. Provide short term intensive leadership and nature of the job on an in-service basis for state supervisory personnel in direct contact with the schools.

4. To identify and implement a common core of professional vocational teacher-educator courses. The following list is suggested core courses.

a. Undergraduate

   (1) Facility Planning
   (2) Curriculum Development in Vocational Education
   (3) Evaluation Techniques
   (4) Instructional Methods
   (5) Media Instruction
   (6) Introduction to Vocational Education
   (7) Instructional Materials
   (8) Occupational Analysis
   (9) Programs for the disadvantaged and handicapped youth

b. Graduate

   (1) History of Vocational Education
   (2) Philosophy of Vocational Education
   (3) Program Planning
   (4) Organization and Administration of Vocational Education Program
   (5) Public Relations
   (6) Conference Leading

5. To equip the current teacher force through in-service programs to deal with special programs which include the disadvantaged and the handicapped. A potential way of accomplishment:

   a. Provide comprehensive workshops and seminars designed to familiarize vocational education teachers with problems associated with the disadvantaged and the handicapped.

6. To provide an organized program to up-grade local administrators. A potential way of accomplishment:

   a. Provide short term intensive training programs in the processes of administration and supervision of vocational programs.

7. To develop organized professional programs for vocational teachers. A potential way of accomplishment:

   a. Provide a variety of in-service and extension courses to promote competency in the professional skills.

8. To develop a long range recruitment plan for vocational teachers. Potential ways of accomplishment:

   a. Improve the image of vocational education.
   b. Provide for an effective vocational guidance program at all levels of education.
   c. Correlate the practical arts with occupational education.
   d. Make maximum utilization of teacher sources and develop others.
   e. Revise general education requirements for all teachers to include the foundations of vocational education.

9. To develop a realistic reimbursement program for teacher educator services between state officer and institutions which is based on research in teacher education needs. The program should encourage at least provisions for the following services:

   a. Rewards for new programs relevant to the needs of the area and the student.
   b. Reimbursement for pre-service and in-service programs based on the extent and quality and service provided.
   c. Rewards for providing programs materials and facility development services to local schools.

LIST OF VOCATIONAL SERVICE AREA GROUP LEADERS

Agriculture Education

Chairman:	Lowery Davis, Head, Department of Agriculture Education, Clemson University, Clemson, South Carolina.
Resource Person:	George W. Wiegers, Jr., Head, Department of Agriculture Education, University of Tennessee, Knoxville, Tennessee.
Recorder:	James C. Atherton, Professor, Agricultural Education, Louisiana State University, Baton Rouge, Louisiana.

Business and Office Education

Chairman:	William R. Pasewark, Chairman, Business Education, Texas Tech University, Lubbock, Texas.
Co-Chairman:	Alfred L. Patrick, Professor and Department Chairman, Business Education and Office Administration, Eastern Kentucky University, Richmond, Kentucky.
Resource Person:	George Wagoner, Head, Business Education and Office Administration, University of Tennessee, Knoxville, Tennessee.
Recorder:	Bertha Wakin, Associate Professor of Business Education, State University of New York, Albany, New York.

Distributive Education

Chairman:	Richard L. Almarode, Director, Teacher Training Educational Institute, American Hotel and Motel Association, Tallahassee, Florida.
Resource Person:	Carroll B. Coakley, Head, Distributive Education, University of Tennessee, Knoxville, Tennessee.
Recorder:	Elmo Johnson, Regional Supervisor Distributive Education, State Department of Education, Knoxville, Tennessee.

Home Economics Education

Chairman: Sylvia L. Lee, Associate Professor and Head, Home Economics Education, Oregon State University, Corvallis, Oregon,

Resource Person: Nell Logan, Professor and Head, Home Economics Education, University of Tennessee, Knoxville, Tennessee.

Recorder: Venetta Lewis, Associate Professor, Home Economics, University of Montana, Missoula, Montana.

Technical Education

Chairman: Carl R. Bartel, Professor, Industrial Technical Education, Arizona State University, Tempe, Arizona.

Resource Person: Sidney Cohen, Consultant, Teacher Training, Connecticutt State Department of Education, Manchester, Connecticutt.

Recorder: Ronald M. Frye, Chairman, Technology and Industrial Education, Central Washington State College, Ellensburg, Washington.

Trade and Industrial Education

Chairman: James R. Eddy, Dean Emeritus, Division of Extension, University of Texas, Austin, Texas.

Resource Person: Ivan Lee, Teacher Educator, Secondary Education, University of Nevada, Reno, Nevada.

Recorder: Edward G. Hill, Head, Industrial Education, University of Minnesota, Deluth, Minnesota.

Guidance and Counseling

Chairman: Gerald LaBorde, Assistant Director, Teacher Institute, University of Tennessee, Knoxville, Tennessee.

Resource Person: Dolph Camp, Counselor Educator, Psychology, Louisiana Polytechnic Institute, Little Rock, Arkansas.

Recorder: Lawrence DeRidder, Head, Department of Educational Psychology and Guidance, University of Tennessee Knoxville, Tennessee.

Administration of Vocational Teacher Education

Chairman:	**Phillip Teske, United States Office of Education, Acting Chief, Instructional Materials and Practices Branch, Division of Comprehensive and Vocational Education Research, U.S.O.E., Washington, D. C.**
Resource Person:	**Donald Brown, Director, Teacher Institute, College of Education, University of Tennessee Knoxville, Tennessee**
Recorder:	**William S. Akers, Management Development, Union Carbide, Y-12 Plant, Oak Ridge, Tennessee.**

APPENDIX D

NATIONAL SEMINAR ON VOCATIONAL TEACHER EDUCATION
Morrill Hall - University of Tennessee
Knoxville, Tennessee

August 11-22, 1969

	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
1. The purposes of this National Seminar were clear to me	7	46	4	7	2
2. The objectives of this seminar were not realistic	1	8	10	39	8
3. Specific purposes made it easy to work efficiently	0	31	21	11	3
4. The participants accepted the purposes of this seminar	5	43	15	2	0
5. The objectives of this seminar were not the same as my objectives	2	9	7	44	5
6. I didn't learn anything new	2	1	1	30	33
7. The material presented was valuable to me	22	41	1	4	0
8. I could have learned as much by reading a book	0	1	2	26	38
9. Possible solutions to my problems were considered	5	51	6	2	0
10. The information presented was too elementary	1	2	1	50	13
11. The speakers really knew their subjects	13	48	2	3	0
12. The discussion leaders were not well prepared	3	13	7	35	8
13. I was stimulated to think objectively about the topics presented	21	41	6	1	0
14. New acquaintances were made which will help in my work	46	22	1	0	0
15. We worked together as a group	32	33	2	1	1

	Strongly Agree (5)	Agree (4)	Un-decided (3)	Dis-agree (2)	Strongly Disagree (1)
16. We did not relate theory to practice	0	4	11	40	13
17. The sessions followed a logical pattern	5	44	8	8	1
18. The schedule was too fixed	0	2	4	43	18
19. The group discussions were excellent:					
a. service group discussions	25	33	4	7	0
b. mixed group discussions	15	40	5	9	0
20. There was very little time for informal conversation	0	4	1	36	22
21. I did not have an opportunity to express my ideas	1	0	0	33	34
22. I really felt a part of:					
a. the service group	35	31	0	1	1
b. the mixed group	27	35	2	2	1
23. My time was well spent	25	36	5	3	0
24. The program met my expectations	8	39	16	3	0
25. I have no guide for future action	1	3	3	48	13
26. Too much time was devoted to trivial matters	1	12	8	38	9
27. The information presented was too advanced	0	0	3	42	24
28. The content presented was not applicable to my work	0	1	4	43	19
29. Seminars of this nature should be continued next year	35	25	7	1	1
30. Seminars such as this will contribute little to improved vocational-technical education	0	0	0	34	34

	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
31. The presentations of the models were valuable experiences:					
a. U.T. Pilot Teacher Program	17	36	10	3	0
b. VAULT Program at St. Louis	8	27	19	10	1
c. Teacher Institute at Oak Ridge	8	35	11	11	0
d. Job Corps Camp	12	37	9	7	1
32. The facilities were adequate for the seminar meetings	53	16	0	0	0
33. The living accommodations were satisfactory	54	9	0	2	0
34. The food service was desirable	47	21	0	1	0

GENERAL COMMENTS

A. Suggestions for improvement:

(See attachment.)

B. Problem areas needing further study:

(See attachment.)

NATIONAL SEMINAR ON VOCATIONAL TEACHER EDUCATION
Morrill Hall - University of Tennessee
Knoxville, Tennessee

August 11-22, 1969
Post Evaluation by Participants

	Strongly Agree (5)	Agree (4)	Un-decided (3)	Dis-agree (2)	Strongly Disagree (1)
1. The purposes of the National Seminar were clear to me	14	34	5	4	1
2. The objectives of the seminar were not realistic	1	6	10	32	9
3. Specific purposes made it easy to work efficiently	3	40	7	6	1
4. The seminar has encouraged me to use group planning in my department	9	32	10	3	1
5. The objectives of the seminar were not the same as my objectives	1	7	10	34	5
6. I didn't learn anything new	0	9	2	28	28
7. The material presented was valuable to me	13	43	1	1	0
8. I could have learned as much by reading a book	0	3	2	33	22
9. Possible solutions to my problems were considered	3	43	7	5	1
10. The information presented was too elementary	0	4	2	46	6
11. The speakers were knowledgable of their subjects	23	34	2	0	0
12. The vocational departments plan curriculums together	0	29	10	8	4
13. I was stimulated to think objectively about the topics presented	12	45	0	1	0
14. New acquaintances were made which have been maintained	11	40	3	4	0

	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
15. We worked together as a group	17	40	1	0	0
16. We did not relate theory to practice	1	4	5	42	6
17. Priorities established at the seminar have been applied directly in my institution	2	23	11	13	2
18. Our state plan includes no organized inservice teacher programs	4	5	4	26	17
19. The group discussions were excellent:					
a. service group discussions	17	36	0	2	1
b. mixed group discussions	11	37	2	4	0
20. There was very little time for informal conversation	2	8	0	34	14
21. Our institution faculty (state department) has met with another to coordinate vocational teacher education preparation	8	31	7	14	3
22. I really felt a part of:					
a. the service group	13	37	0	1	0
b. the mixed group	16	34	3	3	1
23. My time was well spent	18	35	1	0	1
24. The seminar helped our institution to refocus on vocational teachers needs	9	31	9	4	1
25. I left the seminar with no guide for future action	0	4	6	35	12
26. Too much time was devoted to trivial matters	2	1	4	41	9
27. We have strengthened our institutional relationships	5	32	13	5	1

	Strongly Agree (5)	Agree (4)	Un-decided (3)	Dis-agree (2)	Strongly Disagree (1)
28. The content presented was not applicable to my work	0	2	2	42	11
29. Seminars of this nature should be continued next year	20	28	6	2	1
30. Seminars such as this will contribute little to improved vocational-technical education	0	1	2	30	23
31. We have examined our teacher recruitment and teacher placement procedures	5	26	13	8	2
32. We have affected changes in our pre-service teacher experiences as a result of the seminar	3	28	11	9	2
33. We have examined the core concept in our vocational teacher education program	11	30	6	5	2
34. We have established some immediate and long range vocational teacher education guidelines	8	32	7	5	2
35. The ideas and concepts presented at the seminar have been disseminated to other staff members	10	42	3	2	1
36. As a result of the National Seminar experience I feel:					
a. that my understanding of the objectives of the various vocational service has been improved	14	33	6	4	0
b. that my knowledge of the problems of my service are common to all services	7	33	8	8	0
37. I have become more aware of the need for inservice experience and continued professional growth	17	35	4	1	0

	Strongly Agree (5)	Agree (4)	Un-decided (3)	Dis-agree (2)	Strongly Disagree (1)
38. There is a great need for me to cooperate with all vocational services and not concentrate within one service	30	27	1	1	1
39. My work with teachers and/or teacher trainees has reflected the thinking, concepts, and ideas expressed at the seminar	18	34	3	2	0

GENERAL COMMENTS

A. Suggestions for improvement:

B. Problem areas needing further study:

APPENDIX E

PARTICIPANTS

William S. Akers	Management Development Union Carbide Y-12 Plant Oak Ridge, Tennessee
James J. Albracht	Assistant Professor Adult Vocational Education Kansas State University Manhatten, Kansas
Richard L. Almarode	Director, Teacher Training Educational Institute American Hotel and Motel Association Tallahassee, Florida
James C. Atherton	Professor, Agriculture Education Louisiana State University Baton Rouge, Louisiana
Carl R. Bartel	Professor, Industrial Technical Education Arizona State University Tempe, Arizona
Wilfred H. Bates	Director of Occupational Education College of Education Western Kentucky University Bowling Green, Kentucky
J. A. Battle	Dean, College of Education University of South Florida Tampa, Florida
Lucy T. Battle	Counselor Hillsborough County Schools Tampa, Florida
William W. Bearden	Head, Department of Industrial Education Tuskeege Institute Tuskeege, Alabama
John A. Beaumont	Consultant on Vocational Education Bradenton, Florida
Arthur O. Berry	Professor, Industrial Education Gorham State College of University of Maine Westbrook, Maine
Cecil Boreing	State Department of Education Nashville, Tennessee

Betty Berzon	**Director, Bell and Howell Human Development Institute Los Angeles, California**
Annelle Bonner	**Professor and Chairman Business Education University of Southern Mississippi Hattisburg, Mississippi**
Herman Boroughs	**Professor University of Southern Mississippi Hattisburg, Mississippi**
Leon Boucher	**Associate Professor Agriculture Education Ohio State University Columbus, Ohio**
Henry Brito	**Assistant Professor of Education University of Idaho Pocatello, Idaho**
Donald V. Brown	**Director, Teacher Institute University of Tennessee Knoxville, Tennessee**
Marvin M. Brown	**Teacher-Educator Distributive Education University of Georgia Athens, Georgia**
Dolph Camp	**Counselor Educator, Psychology Louisiana Polytechnic Institute Little Rock, Arkansas**
Earl T. Carpenter	**Associate Professor Agriculture Education Clemson University Clemson, South Carolina**
Carroll B. Coakley	**Head, Distributive Education University of Tennessee Knoxville, Tennessee**
Robert Childers	**Executive Secretary Committee on Occupational Education Southern Association of Colleges And Schools Atlanta, Georgia**

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Mary Jim Combs	Instructor, Home Economics Education University of Georgia Athens, Georgia
Robert M. Comfort	Assistant Professor Business Education Shippensburg State College Shippensburg, Pennsylvania
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William P. Danenburg	Assistant Dean College of Education University of South Florida Tampa, Florida
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John W. Devine	Professor-Chairman, Business Education & Office Administration Murray State University Murray, Kentucky
Ray C. Doane	Associate Professor Technical and Adult Education University of Connecticut Ellington, Connecticut
William A. Doerr	Instructor, Agriculture Industries Southern Illinois University Carbondale, Illinois
Billy J. Douthat	University of Tennessee Knoxville, Tennessee

Charlie M. Dunn	Technical Education Assistant Commissioner of Education State of Tennessee Nashville, Tennessee
James R. Durkee	Teacher Educator, Vocational Education University of Wyoming Laramie, Wyoming
James R. Eddy	Dean Emeritus Division of Extension University of Texas Austin, Texas
Conan S. Edwards	Director of Secondary Education Madison Public Schools Madison, Wisconsin
Rupert N. Evans	Dean and Professor Vocational and Technical Education University of Illinois Urbana, Illinois
Duane L. Ewer	Business Education Northern State College Aberdeen, South Dakota
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N. W. Gates	University of Tennessee Knoxville, Tennessee
A. Lester Harkleroad	University of Tennessee Knoxville, Tennessee

John W. Glenn	State Coordinator for Vocational-Technical Education Northern Arizona University and State Department of Vocational Education Phoenix, Arizona
Louis R. Graziano	Assistant Professor Business Education Eastern Michigan University Trenton, Michigan
Richard E. Green	Vocational Guidance Coordinator Division of Guidance and Testing Ohio State Department of Education Columbus, Ohio
Lilla C. Halchin	Head, Home Economics Mansfield State College Mansfield, Pennsylvania
William H. Hamilton	Assistant Professor, Education Purdue University West Lafayette, Indiana
Earl Halvas	Business Education Utah State University Logan, Utah
Edward G. Hill	Head, Industrial Education University of Minnesota Duluth, Minnesota
Elaine W. House	Lecturer in Education Vocational-Technical Education Rutgers University New Brunswick, New Jersey
William A. Householder	Professor, Agriculture Eastern Kentucky University Richmond, Kentucky
Billy D. Jackson	Assistant Supervisor Vocational Department State Department of Education Santa Fe, New Mexico
John W. Jackson	Distributive Education Orangeburg, South Carolina
Robert A. Hilliard	University of Tennessee Knoxville, Tennessee
Elmo Johnson	State Department of Education Knoxville, Tennessee

Larry L. Hyke	Coordinator Vocational-Technical Education State Department of Education Knoxville, Tennessee
Robert Logue	Student University of Tennessee Knoxville, Tennessee
Barney Myers	Student University of Tennessee Knoxville, Tennessee
Arthur Morgan	Student University of Tennessee Knoxville, Tennessee
Bill Radcliff	Business and Distributive Education University of Tennessee Knoxville, Tennessee
Donald Riggs	Industrial Education University of Tennessee Knoxville, Tennessee
Joe Reed	Professor and Department Head Industrial Education University of Tennessee Knoxville, Tennessee
Kay Scholfield	Student University of Tennessee Knoxville, Tennessee
Wallace Sexton	Student University of Tennessee Knoxville, Tennessee
James M. Simpson	University of Tennessee Knoxville, Tennessee
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George Wagoner	Professor and Head Business Education & Office Administration University of Tennessee Knoxville, Tennessee
Donald White	

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Walt LeBaron	Systems Analysist Systems Analysis and Teacher Education Washington, D. C.
Ivan E. Lee	Teacher Educator, Secondary Education University of Nevada Reno, Nevada
Sylvia L. Lee	Associate Professor and Head Home Economics Education Oregon State University Corvallis, Oregon
Otto P. Legg	Senior Program Officer Division of Vocational-Technical Education U. S. Office of Education Washington, D. C.
Thelma H. Leonard	Professor, Home Economics Education Louisiana State University Baton Rouge, Louisiana
Jerome I. Leventhal	Professor, Vocational Education Temple University Warminster, Pennsylvania
Nell Logan	Professor, Home Economics Education University of Tennessee Knoxville, Tennessee

Vanetta M. Lewis	**Associate Professor, Home Economics University of Montana Missoula, Montana**
Bill E. Lovelace	**Instructional Program Director Vocational Program Development Texas Education Agency Austin, Texas**
Charles E. Martin	**Regional Assistant Commissioner U. S. Office of Education Division of AVLP Regional Office of Education Chicago, Illinois**
Mildred Matthews	**Instructor, School of Education Division of Adult Education Oregon State University Corvallis Oregon**
Ralph W. Matthews	**Administrative Instructor Division of Vocational Education Oregon State University Corvallis, Oregon**
John Mattingly	**Teacher-Educator Kent State University Kent, Ohio**
Robert McCardle	**Vocational Teacher Education Administration Mitchell, South Dakota**
Earl S. Mills	**Instructor, Industrial Education Wayne State University Detroit, Michigan**
Walter E. Miner	**Consultant, Education New Hampshire State Department of Education Concord, New Hampshire**
Randolph J. Nelson	**Associate Professor Educational Psychology University of Connecticut Madison, Wisconsin**
Robert L. Ogle	**Professor, Industrial Education Western Kentucky University Richmond, Kentucky**

William R. Pasewark	Chairman, Business Education Texas Tech University Lubbock, Texas
Alfred L. Partick	Professor and Department Chairman Business Education and Office Administration Eastern Kentucky University Richmond, Kentucky
John M. Patterson	Acting Chairman, Distributive Education Old Dominion College Norfolk, Virginia
Richard B. Peterson	Instructor-Director of Secretarial Program Mankato State College North Mankato, Minnesota
Robert A. Phillips	Supervisor, Teacher Education Tennessee State Department of Education Manpower Development Training Morris Chapel, Tennessee
Robert R. Price	Professor and Head, Agriculture Education Oklahoma State University Stillwater, Oklahoma
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Oliver W. Robinson	Head, Department of Agriculture Education Tuskegee Institute Tuskegee, Alabama
Mary P. Royal	Instructor, Home Economics University of New Hampshire New Hampshire State Department of Education

Eugene E. Ruyle	**Human Development Institute Atlanta, Georgia**
Mat Reiser	**Director, Technical Education Cleveland Junior College Cleveland, Tennessee**
Lucille C. Sampson	**Associate Professor Business Administration New Mexico Highlands University Las Vegas, New Mexico**
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Robert E. Scott	**Associate Professor Trade and Technical Education Kansas State College Pittsburg, Kansas**
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Charles F. Templeman	**Assistant Vice President Secondary Schools South Western Publishing Co. Cincinnati, Ohio**
Philip R. Teske	**Acting Chief Instructional Materials and Practices Branch Division of Comprehensive and Vocational Education Research U. S. Office of Education Washington, D. C.**
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Irene Von Cseh	Assistant Professor, Home Economics Hunter College of the City University of New York New York, New York
Bertha B. Wakin	Associate Professor, Business Education State University of New York Albany, New York
Ann L. Walsh	Associate Professor and Department Head, Home Economics University of Alaska College, Alaska
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James L. Wattenbarger	Director, Institute of Higher Education College of Education University of Florida Gainesville, Florida
Bonard Wilson	Senior Consultant Human Development Institute Bell and Howell Atlanta, Georgia
George W. Wiegers	Professor and Head Agriculture Education University of Tennessee Knoxville, Tennessee
Robert Werner	Student University of Tennessee Knoxville, Tennessee

NATIONAL SEMINAR ON VOCATIONAL TEACHER EDUCATION

Monday August 11, 1969

	Fly-in, Drive-in to Knoxville
3:00-9:00	Registration, Justin Morrill Hall, University of Tennessee
6:30 P.M.	Dinner, North Dining Room, Presidential Court

Tuesday August 12

7:00-8:00 A.M.	Breakfast - North Dining Room, Presidential Court
8:10	Bus to College of Agriculture Campus Plant Science Auditorium
8:30 	First General Session - Challenges Presiding: Dr. James McComas, Dean, College of Education, The University of Tennessee *"Welcome"* Dr. Andrew Holt, President, The University of Tennessee
9:00	*"Vocational Teacher Education Challenges"* Dr. Rupert Evans, Dean, College of Education, University of Illinois Interaction
10:00	Mid-morning Break - Refreshments, Lobby
10:30	*"Systems Analysis in Education"* Mr. Walt LeBarron Systems, Inc., Washington, D.C.
Noon	Lunch at Plant Science Auditorium - Participants Lunch, South Dining Room, Presidential Court - Spouses
1:30 P.M.	Second General Session - Challenges Presiding: Dr. James McComas *"Human Development Programs and Concepts"* Mrs. Betty Berzon, Director - Bell & Howell, Human Development Institute, Los Angeles, Calif.
3:00	Mid-afternoon Break - Refreshments, Lobby
3:30	Interaction
5:00	Bus to Morrill Hall
6:30 P.M.	Dinner, North Dining Room, Presidential Court
7:30 P.M.	Meeting of Advisory Panel and Planning Committee, 2nd. floor, Morrill Hall

Wednesday August 13

7:00-8:00 A.M.	Breakfast, North Dining Room, Presidential Court
8:30 A.M. 	Third General Session - Models Morrill Hall, Second floor Presiding: Dr. Donald Brown *"The U-T Pilot Teacher Program"* Dr. Russell French, Director, University of Tennessee Interaction
10:00	Mid-Morning Break - Refreshments
10:30	*"The VAULT Program"* Dr. Joseph Kelley, Vice President Webster College, St. Louis, Missouri Professor Fred Stopsky, Director, Teacher Education Webster College, St. Louis, Missouri Interaction
Noon	Lunch, North Dining Room, Presidential Court
1:00 P.M.	Participants: Buses to Oak Ridge The Teacher institute - Dr. Donald Brown, Director Spouses: Buses to Atomic Energy Museum
3:30	Buses from Teacher Institute to Atomic Energy Museum
5;30	Buses to picnic, Clark Park, Oak Ridge, Tennessee
9:00	Last bus loads for Morrill Hall

Thursday August 14

7:00-8:00 A.M.	Breakfast, North Dining Room, Presidential Court
8:30	*"Post Secondary Education Challenges"* Dr. James Wattenbarger Director, Institute for Higher Education, University of Florida Interaction
10:00	Mid-morning Break - Second floor
10:30 	Small Group Action Planning Morrill Hall Agriculture Education: Dr. Lowery Davis, Chmn., 6th floor lounge Business Education: Dr. William Pasewark, Chmn.,5th.floor lounge Distributive Education: Mr. Richard Almarode, Chmn. 4th. floor lounge Guidance & Counseling: Mr. Gerald LaBorde, Chmn. 14th. floor lounge Health Related Education: Mrs. Sandra Rasmussen, Chmn. 7th. floor lounge Home Economics Education: Dr. Sylvia Lee, Chmn. 8th. floor lounge Industrial Education: Dr. James Eddy, Chmn., 2nd. floor lounge Technical Education: Dr. Carl Bartel, Chmn., 3rd. floor lounge Administration of Vocational Teacher Education: Dr. Phillip Teske, Chmn., 13th. floor lounge
Noon	Lunch, North Dining Room, Presidential Court
1:00 P.M.	Small Group Action Planning Reconvene
2:30	Mid-afternoon Break - Second floor
3:00	Small Group Action Planning Reconvene
4:30	Adjourn
6:30	Dinner, North Dining Room Presidential Court
7:30 	Advisory Panel Meeting, Room 133 Morrill Hall

Friday August 15

7:00-8:00 A.M.	Breakfast, North Dining Room Presidential Court
8:30 	Small Group Action Planning (Continues in same rooms as listed for Thursday, August 14, 1969, sessions).
10:00	Mid-morning Break - Refreshments, 2nd. floor, Morrill Hall
10:30	Reconvene
Noon	Lunch, Second floor, Presidential Court
1:00 P.M.	Reconvene
2:30	Mid-afternoon Break - Refreshments, 2nd. floor, Morrill Hall
3:00	Reconvene
4:30	Adjourn
5:00 	Advisory Panel Meeting, Room 133, Morrill Hall
6:30	Dinner, North Dining Room, Presidential Court

Saturday Morning August 16

7:00-8:00 A.M.	Breakfast, North Dining Room Presidential Court
8:30 	Small Group Action Planning (Contunues in same rooms listed for Thursday, August 14, 1969, sessions.)
10:00	Mid-morning Break - Refreshments, 2nd. floor, Morrill Hall
10:30	Reconvene
Noon	Lunch, North Dining Room, Presidential Court Advisory Panel rough draft reports due

Saturday afternoon and Sunday August 16-17

Free Time

Saturday night	Dinner served in Rafters Grill, 1st. floor of University Center. 5 P.M. - 7 7 P.M. (Use meal tickets)

Monday August 18

7:00-8:00 A.M.	Breakfast, North Dining Room Presidential Court
8:30	Fourth General Session - Challenges Presiding: Mr. Charlie M. Dunn Assistant Commissioner of Education, State of Tennessee, Vocational-Technical Education Morrill Hall, Second floor *"Cooperation in Vocational Teacher Education* Mr. John Beaumont, Consultant on Voc. Ed., Bradenton, Florida Interaction
10:00	Mid-morning Break - Refreshments, 2nd. floor
10:30	*"Teacher Certification for the Future"* Dr. Robert Childers, Director Southern Association of Colleges and Schools Atlanta, Georgia Interaction
Noon	Lunch, North Dining Room, Presidential Court
1:00 P.M.	Small Group Action Planning Geographic Group 1A: Prof. George Wagoner, Chmn. 2nd. floor lounge 1B: Mrs. Sandra Rasmussen, Chmn. 3rd. floor lounge Geographic Group 2A: Dr. Conan Edwards, Chmn. 4th. floor lounge 2B: Dr. Lowery Davis, Chmn. 5th. floor lounge 2C: Mr. Phillip Teske, Chmn. 6th. floor lounge Geographic Group 3A: Dr. Kenneth Hoyt, chmn. 7th. floor lounge 3B: Dr. Carl Bartel, Chmn. 8th. floor lounge Geographic Group 4: Dr. Sylvia Lee, Chmn. 13th. floor lounge Geographic Group 5: Dr. James Eddy, Chmn. 14th. floor lounge
2:30	Mid-afternoon Break - Refreshments, 2nd. floor
3:00	Reconvene
4:30	Adjourn
6:30	Dinner, North Dining Room, Presidential Court
7:30	Advisory Panel Meeting, Room 133, Morrill Hall

Tuesday August 19

7:00-8:00 A.M.	Breakfast, North Dining Room, Presidential Court
8:30	Small Group Action Planning (Contunues in same rooms listed for Monday, August 18, 1969, sessions.)
9:45	Mid-morning Break - Refreshments, 2nd. floor
10:00	Reconvene
11:00	Lunch, North Dining Room, Presidential Court
Noon	Buses load for Cherokee, with intermediate stops at Park Visitor Center, Gatlinburg, & Newfound Gap
3:00 P.M.	Job Corps Model, Oconaluftee Conservation Center
4:30	Dinner at Oconaluftee Conservation Center
5:30	Bus tour of Pioneer Village and Cherokee, N. C.
8:30	Outdoor drama - "Unto These Hills"
11:00	Buses load for return to Knoxville

Wednesday August 20

7:30-8:30 A.M.	Breakfast, North Dining Room, Presidential Court
9:00	Small Group Action Planning (Continues in same rooms listed for Monday, August 18, 1969, sessions.)
10:00	Mid-morning Break - Refreshments, 2nd. floor
10:30	Reconvene
Noon	Lunch, North Dining Room, Presidential Court
1:00 P.M.	Small Group Action Planning

2:30	Mid-afternoon Break - Refreshments, 2nd. floor
3:00	Reconvene
4:30	Adjourn
6:30	Dinner, North Dining Room, Presidential Court
7:30	Advisory Panel Meeting, Room 133, Morrill Hall

Thursday August 21

7:30-8:30 A.M.	Breakfast, North Dining Room, Presidential Court
9:00	Small Group Action Planning (Continues in same rooms listed for Monday, August 18, 1969, sessions.)
10:00	Mid-morning Break - Refreshments, 2nd. floor
10:30	Reconvene
Noon	Lunch, North Dining Room, Presidential Court
1:00 P.M.	Reconvene
2:30	Mid-afternoon Break - Refreshments, 2nd. floor
3:00	Reconvene
4:30	Adjourn
6:30	Dinner, North Dining Room, Presidential Court
7:30	Advisory Panel Meeting, Room 133, Morrill Hall

Friday August 22

7:00-8:00 A.M.	Breakfast, North Dining Room, Presidential Court
3:30	Fifth General Session - Report Morrill Hall, Second floor Presiding: Dr. Donald Brown Advisory Panel Final Report
9:45	Mid-morning short break Pick up and sign for expense checks and check-out at lobby desk
11:00	Lunch, North Dining Room, Presidential Court
P.M.	Fly-out, Drive-out home

NATIONAL SEMINAR ON VOCATIONAL TEACHER EDUCATION

Sponsored by
U. S. Office of Education — Bureau of Research
Tennessee State Department of Education, Division of Vocational - Technical Education and the College of Education University of Tennessee

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